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DAILY DIGEST

Prepared in the Press Service, Office of Information, United States Department of Agriculture, for the purpose of presenting all shades of opinion as reflected in the press on matters affecting agriculture, particularly in its economic aspects. Approval or disapproval of views and opinions quoted is expressly disclaimed. The intent is to reflect the news of importance.

Vol. LXIII, No. 61

Section 1

December 11, 1936

AAA TAX
RULING

The Federal Government won a major victory yesterday in efforts to collect the so-called "windfall" tax on refunded AAA processing taxes. Judge Robert C. Baltzell, of the southern Indiana district court, held the tax constitutional. Val Nolan, United States district attorney, who handled the Government's case in the suit brought by Kingan & Company, Indianapolis packers, said the decision by Judge Baltzell was the first such ruling in the country. He said the ruling probably would be used as a precedent in upholding the collection of similar taxes on money refunded to coal companies after the Guffey coal law was declared unconstitutional. (A.P.)

EMERGENCY
FREIGHT RATES

The railroads of the country, reporting a yield of \$100,000,000 for the first ten months of this year from emergency freight rates authorized by the Interstate Commerce Commission, yesterday asked the commission to continue those rates until revised tariff system is approved. The nation's shippers, violently opposing any further extension of the surcharges, due to expire December 31, contended in rebuttal that the railroads have been given "ample time to clean house". They told the commission that the railroads, in effect, were asking "a money judgment of from \$50,000,000 to \$150,000,000 against the shippers." (Washington Post.)

BRAZILIAN
COFFEE QUOTA

A Rio de Janeiro cable to the New York Times says a test case against the National Coffee Department's 30 percent sacrifice quota was won by the plaintiffs yesterday. The Supreme Court decided the case in favor of several Sao Paulo coffee growers, who asked an injunction writ to restrain the coffee department from forcing growers to deliver their coffee at 5 milreis a bag, bagging included, to meet the 30 percent sacrifice quota. The plaintiffs charged and were sustained by the court, that the NCD ruling was unconstitutional in that it injured the growers' well being because of the low price level set by the coffee department.

WOOD HOMES
DEMONSTRATION

In session at Madison, Wisconsin, this week, lumbermen from all parts of the United States decided to launch a nation-wide home-building demonstration of unprecedented scope. One thousand demonstration home units of from one to three houses each, to be built this spring in 1,000 cities of the United States will bring before the public the fact that small, low-cost homes of beauty and charm, equipped with basic modern necessities, can be built in lumber at costs ranging from \$2,500 to \$3,500. (Press.)

The winter exhibit of the Carnegie Institution, Washington, D.C., will be open December 12, 13 and 14, 1936.

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Mechanical Cotton Pickers "The successful tests of the Rust cotton picker in which a record poundage of cotton was picked in a given period of time," says Business Week (December 5), "have acted as a spur to further experimentation on mechanical cotton pickers, and field trials have been held in the Mississippi Delta this fall. First of these machines is the famed International Harvester picker which has been under construction over a period of years and upon which it is reported over a million dollars has already been expended in experimentation. Work on this machine is being done in greatest secrecy in an abandoned gin shed near Clarksdale, Miss....Samples of cotton picked by the International machine during a period of two months (beginning about September 1) and ginned on a comparatively modern gin plant (receiving no special processing but being handled in the same manner as ordinary hand-picked cotton) have been classed by expert cotton men as losing at least two grades in character, dropping from good middling (average grade of hand-picked cotton in that locality) to middling color, strict low color, low middling color with all bales carrying low middling trash. This represents an economic loss amounting to at least \$20 per bale. The other contestant is the Berry picker, based upon the inventions of Hiram Berry of Greenville, Miss....In picking tests it is said that the Berry picker traversed rows 700 feet long in 3 1/2 to 4 minutes and gathered some 40 to 50 pounds of cotton on the first picking. Whether the Berry picker has received adequate field tests is problematical..."

Fruit Disease Treatment H. R. McLarty and J. C. Wilcox report in Country Life in British Columbia (December) on the new boric acid treatment for drought spot and corky core. The authors, who have carried on field experiments with this treatment, says in one paragraph: "The injection method was recommended last year because it was the only successful method that had been tested up to that time. It was never intended to be more than a 'stop gap' until by further experiments a simpler, cheaper and less dangerous method could be worked out. In the investigation of diseases of this nature, where the probable cause is due to some unbalance in the nutrition of the tree, the injection method is an effective means of discovering the nature of the unbalance. It was used, therefore, not with any intention that it might have a general application, but for the sole purpose of discovering the cause of these diseases. This it was effective in doing; and as the technique of the method was fairly simple, it was decided to recommend it to growers until more satisfactory methods of applying the boric acid could be tested. These subsequent experiments have demonstrated that as a horticultural practice soil applications are much to be preferred to the injection method..."

Virus Study Medical Record (December 2) says in an editorial on the Second International Congress of Microbiology: "...At the congress the characteristics of viruses were considered at some length. Dr. A. R. Dochez and others from New York and research workers from Europe and Britain contributed to an illuminating discussion, although the main interest of the congress was concentrated on the agency of viruses in the etiology of new growths. Dr. Peyton Rous of New York, who enjoys a world-wide reputation for his work in this direction, opened

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the discussion which was partaken in by Dr. G. P. Berry and his coworkers Drs. G. Lberling, J. Furth, J. Engelbreth-Holm, P. R. Peacock and J. McIntosh. Some necessarily confused issues of an exceedingly complex problem were rendered somewhat clearer. On the other hand, the relationship of viruses to true neoplasms remains an unsolved problem. Indeed, we are only at the beginning of our study of viruses and their influence on the etiology of new growths is a more or less new field. However, being a new field as yet, most of the secrets, lying well below the surface, are still secrets and all that can be said is that the results thus far have been sufficiently encouraging to warrant further and more persistent and deeper investigations. In research of this kind comparative medicine plays a great part, in fact, is essential. Earnest cooperation between the medical and veterinary scientist is essential."

TVA Fertilizer Program

The Tennessee Valley Authority is producing super-phosphate fertilizers, two to five times more powerful than those generally used, and farmers and agricultural experiment stations in seven valley states are giving them a thorough testing, says a Muscle Shoals, Alabama, report by the Associated Press. The authority is striving still further toward higher concentration of plant food, maybe phosphorus itself, an element in which 90 percent of all soils are deficient. Utilizing giant electrical furnaces of the big, wartime plants at Wilson Dam, the authority has already produced fertilizer materials with a phosphorus content as high as 60 percent.

Exports of Food

Exports of food products from the United States in October were valued at \$24,870,000 compared with \$23,650,000 during the corresponding month last year and for the first ten months this year totaled \$174,830,000, against \$169,316,000 in the corresponding period of 1935, according to the Department of Commerce.

"One of the most significant features of the October export movement in food products was the shipment abroad of nearly 1,000,000 bushels of wheat, an amount larger than the entire export movement during the first nine months of the year," the department stated. "The October shipment brought the wheat export figure for the ten months of 1936 to 1,800,000 bushels, more than ten times the amount exported during the same period of 1935." (Press.)

Perosis Prevention

"Perosis, the leg-deforming disease of growing chicks, seems to be almost conquered," says William H. Burrows in Country Gentleman (December). "The recent work of Wilgus, Norris and Heuser, of Cornell University, shows that a minute quantity of manganese, if added to certain diets, prevents the disease...Wilgus and his associates found that when chemically pure calcium phosphates were used, the occurrence of perosis was aggravated to about the same extent as with the use of steamed bone meal. However, when a lower grade of calcium phosphate was used, a preventive rather than a causative effect was noticed. Spectroscopic examination of the lower grade chemical showed the presence of considerable manganese and traces of other metals. It was found that the presence of 0.0035 percent of manganese would prevent perosis at levels of 1.0 and 1.2 percent calcium and at levels of 0.8 and 1.2 percent phosphorus..."

Section 3
MARKET QUOTATIONS

December 10 -- Livestock at Chicago (Closing Quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.50-12.00; cows good 5.25-6.50; heifers 550-750 lbs good and choice 8.50-12.00; vealers good and choice 9.50-11.00; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.25-9.95; 200-250 lbs good and choice 9.70-10.05; 250-350 lbs good and choice 9.80-10.05; slaughter pigs 100-140 lbs good and choice 8.00-9.25. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.25-9.25.

Grain: No. 1 D.No. Spr. Wheat* Minneap. 143 7/8-145 7/8; No. 2 D.No. Spr.* Minneap. 142 7/8-144 7/8; No. 2 Am. Durum* Minneap. 136 $\frac{1}{4}$ -140 $\frac{1}{2}$; No. 1 Hard Amber Durum, Duluth, 142 $\frac{1}{2}$ -150 $\frac{1}{2}$; No. 2 Hard Winter* K.C. 127-131; Chi. 130-132 $\frac{1}{2}$; No. 2 S.R.Wr. St Louis 132 $\frac{1}{2}$; No. 1 W.Wh. Portland 107; No. 2 rye, Minneap. 98-104; No. 2 yellow corn, K.C. 116 1/8-118 $\frac{1}{4}$; St. Louis 109 $\frac{1}{2}$ -111; No. 3, Chi. 107 $\frac{1}{2}$ -110 $\frac{1}{4}$; No. 3 white oats, Minneap. 48 7/8-50 3/8; K.C. 53-56; Chi. 49 $\frac{1}{2}$ -50 $\frac{1}{4}$; St. Louis 51; No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 120-128; No. 2, Minneap. 90-91; No. 1 flaxseed, Minneap. 208-219.

Maine sacked Green Mountain potatoes \$2.15-\$2.50 per 100 pounds in Eastern cities; \$1.82 $\frac{1}{2}$ -\$1.87 $\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites \$1.90 carlot sales in Chicago; \$1.65 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.45-\$2.60 carlot sales in Chicago; \$1.75-\$1.85 f.o.b. Idaho Falls. New York Yellow onions 50¢-75¢ per 50-pound sack in the East; few 55¢ f.o.b. Rochester. Midwestern stock 50¢-75¢ in consuming centers; 50¢ f.o.b. West Michigan points. New York Danish type cabbage 50¢-85¢ per 50-pound sack in terminal markets; sacked per ton \$20-\$22 f.o.b. Rochester. South Carolina Pointed type \$1.10-\$1.30 per 1 $\frac{1}{2}$ -bushel hamper in city markets. New York, U.S. #1, 2 $\frac{1}{2}$ inch minimum, McIntosh apples \$1.75-\$1.90; Rhode Island Greenings \$1.25-\$1.50 and Baldwins \$1.25 per bushel basket in New York. Rhode Island Greenings \$1.30 f.o.b. Rochester.

The average price for Middling 7/8 inch spot cotton in the ten designated markets advanced 14 points from the previous close to 12.76 cents per pound. On the same day last year the price was 11.61 cents. December future contracts on the New York Cotton Exchange advanced 17 points to 12.66 cents, and on the New Orleans Cotton Exchange advanced 17 points to 12.66 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, 34 cents; 91 Score, 33 $\frac{3}{4}$ cents; 90 Score, 33 $\frac{1}{4}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, 19 $\frac{1}{2}$ cents; S.Daisies, 18 $\frac{1}{4}$ cents; Y.Americas, 18 $\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, 34 $\frac{1}{2}$ -35 cents; Standards, 34-34 $\frac{1}{2}$ cents; Firsts, 32-32 $\frac{1}{2}$ cents. (Prepared by BAE)

*Prices basis ordinary protein.

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Vol. LXIII, No. 62

Section 1

December 12, 1936

FARM BUREAU
RESOLUTIONS

The American Farm Bureau Federation resolved last night that a national farm policy must provide: for restoring and maintaining a high degree of soil fertility; a schedule of agricultural tariffs to protect the domestic market from competing imports that hold or force American prices below parity levels; reduction of excessive industrial tariffs to equalize price levels of industrial and agricultural commodities; aggressive efforts to develop new domestic farm products; state and federal marketing agreements; the holding of surpluses from market channels in the most economical way under a system of federal loans based on warehousing or trust receipts. (A.P.)

CARNEGIE
INSTITUTION

The board of trustees of the Carnegie Institution held its annual meeting yesterday to adopt a \$1,620,237 budget for 1937, hold elections and view scientific exhibits which will be thrown open to the public this afternoon and be continued through Monday, says the Washington Post. Coordination of the research activities of scientists in all fields was recommended by Dr. John C. Merriam, president of Carnegie Institution, in his annual report to the trustees. Integrating the different sciences--physical, biological and social--is highly desirable as a means of preserving gains already made and preventing the various branches from working at cross purposes. "...It is desirable to set up types of organization which may bring together scientists, engineers and the forward-looking students of social and economic problems," he said.

FREIGHT RATES
PROTESTED

More than a score of shippers appeared before the Interstate Commerce Commission yesterday to protest vigorously against further extension of emergency freight rates beyond January 1, the date set by the commission for their expiration. The railroads of the country, which petitioned the day before for continuance of the surcharges until their entire base rate schedules are revised, a six to eight month process, will be heard in final rebuttal of shippers' arguments late today at conclusion of the three-day hearing. (Washington Post.)

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Why Things
Grow Old

The leading article in December Harper's is a copy-right one by Roy Helton, Why Things Grow Old. He says in the concluding paragraphs: "Growing old is a diffusion of energy which in living things, and apparently in those feelings and institutions into which men transfer their life energy, takes a special form, and follows a typical pattern. This process will not retrace itself for us, and though that fact is hard to accept, it does give us an advantage in our fight against time. For it compels us to realize that what is here and now is what we have to fight for. Not what is past, lost, or resigned. In every field we fight time by a concentration on whatever the living thing exists for. In a cathedral that was for the glory of God and not the vanity of man. When that fact was lost sight of Gothic art passed into senile decay. Its fervor was diffused into detail. In a love it is for the fusion of two lives to keep their emotions young, and when that fusion becomes secondary to lesser purposes, the energy has become random in form and the love dies. In a government it is for maintaining the youth of the spirit of a culture. When that is lost sight of in the pursuit of special functions or advantages, the government grows old. In all these cases the essence of the process is the increase in random forms of activity, and that fact seems to give us a general and usable law of time."

Indian Science
Abstracts

"...The National Institute of Sciences in India has undertaken the difficult task of compiling an annual bibliography of science in India," says Nature (November 28, London). "This comprises not only the titles of all papers published by authors resident in India and of Indians working abroad, but also of papers dealing with problems specifically related to India. In the majority of cases, not only is the title of the paper given, but it is also followed by a brief but adequate abstract. To those who look upon India as a backward country this publication will come as a revelation, not merely from the volume of the work produced but also by the high standard to which much of it attains. In a country so predominantly agricultural, it is gratifying to find that so much attention is being paid to biological subjects; nearly one-half of the abstracts come under the heads of botany, zoology and physiology, the latter including veterinary and medical subjects. As the general editor points out in his introduction, the present division of subjects, which is under nine main heads, is purely tentative and may require revision in the light of experience."

Hunting
Accidents

"The menace of the unsportsmanlike hunter is coming more and more under control in Ohio," says an editorial in the Ohio Farmer (December 5). "Here and there throughout the state, especially in sections where pheasants and rabbits abound, township and community groups are posting their land, patrolling the boundaries and limiting the sport only to authorized persons. Wood County especially has used this method for financing church expenses and in all cases it is helping keep down loss of life and destruction of property to say nothing of improving the game crop. The casualty list this year, while long, did not read like battle reports from France in the World War..."

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Examination The Civil Service Commission announces the following unassembled examination: biologist (wildlife management) \$3,800, Soil Conservation Service. Applications must be on file not later than the following dates: (2) January 7, 1937, from Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming; (b) January 4, 1937, from states other than in (a).

Butter Color American Creamery and Poultry Produce Review (December Preferences 9) prints an address by H. C. Jackson, Wisconsin Agricultural College. He says in part: "In a study at the Wisconsin Agricultural College to determine the variation in color of butter sent to the dairy department for scoring, more than 60 percent of the samples had too much color to satisfy the eastern trade...Most of the butter examined came from Wisconsin creameries. Wisconsin probably produces as light a colored fat throughout the year as any other state. This is borne out by statements from the trade in the large eastern and Chicago markets. Probably Minnesota, Iowa and the Mountain States have about the same amount of natural color in the milk fat they produce as Wisconsin. The states mentioned produce a large percentage of the nation's butter. The states farther south and in the southwest tend to produce a more highly colored fat due primarily to the breed of cattle in those states and the type of feed consumed. It seems evident therefore that during the greater share of the year the milk fat produced possesses a rather high degree of color. With the attention that is being given to the growing of alfalfa, to newer methods of curing and storing hay and to new types of ensilage it appears that there is going to be more color in the milk fat produced."

Economy Health Association "...In the Economy Mutual Health Association of Wayne County, Indiana, 69 members are enjoying medical privileges provided by their own resident physician," reports Lois Schenck in Prairie Farmer (December 5). "A voluntary association open to either individuals or families, its dues amount to the small sum of \$1.30 per month per family or \$15.60 per year. Individuals pay one-half the family rate. In return, members expect nine benefits as follows: (1) all medicines which the doctor prescribes (except high-priced and unusual medicines); (2) free office consultations; (3) physical examinations at least once a year; (4) free home calls by the doctor; (5) care of emergency cases; (6) full care of chronic cases; (7) all vaccines free to children, at cost to adults; (8) minor surgery that can be done properly in home or office; (9) complete care in maternity cases, except a \$10 special fee. If farmers operate cooperatives for buying oil, feed fertilizer, seed, farm machinery, serum, coal, harness, hardware, paint, then why not one for improved human health? argue members..."

Canned Rabbits A new product was introduced at the Canada Pacific Exhibition in Vancouver this year by the Cariboo Trail Fur Breeders of Laidlaw, B.C., who presented canned rabbits. There are domestic grain-fed rabbits and only the white meat is used by the company in its canned products. The product has recently been introduced on the Vancouver market. (Western Canner & Packer, November.)



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Section 1

December 14, 1936

INTER-AMERICAN TRADE DRIVE

A Buenos Aires report by the Associated Press says the United States yesterday launched before the Inter-American Peace Conference a renewed drive to liberalize the trade programs of the American Republics. Secretary of State Hull introduced two resolutions providing the conference go on record for equality of treatment in international trade and for reduction of excessive trade barriers. That the conference will devote considerable attention to trade questions was brought further in evidence when the Mexican and Peruvian delegations also introduced economic resolutions and other delegations served notice they were considering bringing up pertinent subjects.

GERMAN GRAINS

"All German radio stations rebroadcast yesterday the speech that Col. Gen. Hermann Goering, Commissar for the Four-Year Plan, delivered to the peasant congress at Goslar two weeks ago," says Otto D. Tolischus in a Berlin wireless to the New York Times. "In this address he forcefully impressed on peasants their duty to deliver fixed amounts of bread grains as ordered and especially denounced as a 'traitor' every peasant who used bread grain as feed for hogs or cattle. The reason for the repetition of this speech, which caused astonishment at the time of its delivery by its emphasis, is revealed by the Frankfurter Zeitung. This news paper brushes aside official pretense and frankly declares that Germany is short at least 1,000,000 tons of wheat, which will have to be imported, and another 1,000,000 tons of rye, which will have to be taken out of the seed supply, the reduction of which will in turn imperil pork and other meat supplies unless seed and fodder substitutes can be found..."

CCC ANNUAL REPORT

As long as there are young men eager to work, but idle through no fault of their own, the Civilian Conservation Corps can continue to be "an effective part of our national policy," Robert Fechner, director of the CCC program, stated in his annual report to President Roosevelt, made public yesterday. Mr. Fechner recommended that if the CCC should be removed from the list of emergency agencies, all positions be placed under the classified civil service. At present, administrative work in the various camps is done by Army Reserve personnel, while civilians are employed for other work in Washington offices. (Press.)

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Control of Milk Secretion in Cows Dairy Industries (London, November) contains "The Control of Milk Secretion" by S. J. Folley. He says in part: "The branch of sex physiology which is concerned with the study of milk secretion is of fundamental importance to all whose livelihood depends upon the production and distribution of milk and its various products and scientific advances have led to a closer understanding of the physiological processes governing the production of milk. An idea of what progress has already been made in this direction is given by the fact that it is now possible by relatively simple procedure to cause female rabbits, guinea pigs and other small laboratory animals to produce milk without becoming pregnant and bearing young, and what is more remarkable, to call forth milk secretion in male animals also. That such laboratory achievements may well be the first steps to further discoveries which will be of practical importance to the dairy industry is indicated by the fact that already unmated virgin heifers have been brought into milk by injections of extract of the anterior lobe of the pituitary gland. Heifers so treated, provided they have a moderate amount of udder development, have been found to secrete appreciable amounts of milk so long as the daily injections are continued, although the milk flow ceases as soon as this rather expensive treatment is discontinued. This discovery, though at present remote from the realm of practical politics, gives some idea of what developments agriculture may expect from physiological science before many years are past."

Farm Credit Loans Up Farmers and their cooperative business organizations obtained more credit from institutions of the Farm Credit Administration in October than in any previous month of 1936, according to the Farm Credit Administration. Loans and discounts during the month amounted to \$68,900,000 compared to \$57,300,000 in September and \$78,100,000 in October 1935. Of the total amount loaned in October just past, \$33,300,000 consisted of short-term credit for farm operations and production, \$23,900,000 of loans to cooperatives, and \$11,700,000 of farm mortgage loans. Borrowing on land mortgage security was slightly higher than in September, but due to the decline in refinancing operations, only a little more than a third the October 1935 figure.

Use of Grassland "On every farm there are hundreds of pounds of potential beef, pork or mutton in the form of grass which becomes an absolute loss unless there is livestock to consume it," says an editorial in Farm and Ranch. "On farms without livestock, except work animals, this grass is always lost and oftentimes becomes a fire hazard. Grass is an important crop. It costs nothing to harvest it, if livestock can be put to work. Calves turned on to grass in the spring will make gains of many pounds before it is necessary to feed them anything else and this gain is clear profit. The increasing interest of farmers in establishing permanent pastures and the development of temporary pastures is one of the encouraging phases of southwestern agriculture. It can mean nothing else but more livestock which in turn means a greater acreage of feedstuffs, diversified farms and a better distributed income. The Southwest should lead in livestock production and livestock feeding, both on farms and ranches."

Canadian Trade Curbs Drastic limitation of textile imports cost Canada her world market for wheat, declared C. B. Davidson, secretary of the Canadian Wheat Board, when giving evidence before the Royal Grain Inquiry Commission at Winnipeg, says a Winnipeg report in the Northwestern Miller (December 9). Mr. Davidson was dealing with Canada's trade in relation to the wheat problem and advanced the following five causes for the decline in Canadian wheat exports in recent years: "(1) tariff enactments and the imposition of dumping duties by Canada in 1930, which curtailed imports from European countries; (2) by imposing severe import restrictions on textiles, Canada struck at the very heart of her trade with continental Europe and destroyed the basis of her wheat business there; (3) a trade structure in Canada wherein the bulk of her imports originate in countries which do not normally import Canadian wheat; (4) relatively small imports by Canada from continental Europe, which was formerly a very important market for Canadian wheat, built up resistance to Canadian wheat imports into these markets; (5) steps taken by Argentina, Canada's chief competitor in wheat exports, to cultivate European markets by spreading her imports among these markets and creating large blocks of foreign exchange with which to purchase Argentine wheat."

Express Allowance for CO₂ "As a result of increasing use of solid carbon dioxide for refrigeration of all sorts of perishables, the Railway Express Company announces a new classification in the allowance of CO₂ used for the purpose of preserving certain shipments," says Ice and Refrigeration (December). "The new supplement to the official express classification governing these rates is as follows: when solidified carbon dioxide is used for the purpose of preservation of matter rated second class, an allowance of 10 percent from the gross weight will be made during the entire year, but the weight so ascertained must not be less than the gross weight of the shipment without the solidified carbon dioxide. Shipments refrigerated with solidified carbon dioxide must be plainly marked to show the number of pounds of such refrigerant used in each package. The same order states that when water ice is used for preservation only, an allowance of 25 percent from the gross weight will be made from March to November, inclusive, and an allowance of 15 percent from the gross weight will be made from December to February, inclusive, but the weight so ascertained must not be less than the gross weight of the shipment without the water ice."

Pacific Relations The I.P.R. (Institute of Pacific Relations) Notes (October) says: "The new international research program, as approved by the Pacific Council last summer, consists partly of a few individual projects, mostly for the completion of studies already started, and partly of new 'fields' for research within each of which several national studies may be undertaken. The funds have been provisionally allocated only among the various 'fields', the research chairman and secretary being charged with the work of arranging the methods of inquiry and the financing of the component national studies in consultation with the councils concerned..." Among the studies are: studies of textile industries, completion of land utilization studies, completion of press and public opinion studies, completion of standard of living studies, studies of the treaty port system in China.

Section 3
MARKET QUOTATIONS

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December 11 -- Livestock at Chicago (Closing Quotations):

Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.50-12.00; cows good 5.25-6.50; heifers 550-750 lbs good and choice 8.50-12.00; vealers good and choice 9.50-11.00; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.50-10.15; 200-250 lbs good and choice 9.95-10.25; 250-350 lbs good and choice 10.00-10.25; slaughter pigs 100-140 lbs good and choice 8.25-9.40. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.25-9.25.

Grain: No. 1 D.No.Spr.Wheat* Minneap. $143\frac{1}{2}$ - $145\frac{1}{2}$; No. 2 D.No.Spr.* Minneap. $142\frac{1}{2}$ - $144\frac{1}{2}$; No. 2 Am.Dur.* Minneap. $136\frac{1}{8}$ - $140\frac{1}{8}$; No. 1 Hard Amber Durum, Duluth, $142\frac{1}{8}$ - $150\frac{1}{8}$; No. 2 Hard Winter* K.C. 127 - $130\frac{3}{4}$; K.C. $129\frac{1}{2}$ - $131\frac{3}{4}$; St. Louis 133; No. 2 S.R.Wr. St. Louis $132\frac{1}{4}$; No. 1 W.Wh. Portland 106; No. 2 yellow corn, K.C. $115\frac{1}{2}$ - $117\frac{1}{4}$; St. Louis 109; No. 3, Chi. 105-108; St. Louis 107-108; No. 3 white oats, Minneap. $48\frac{3}{4}$ - $50\frac{1}{4}$; K.C. $52\frac{1}{2}$ -55; Chi. $49\frac{1}{2}$ -50; St. Louis 51; No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 121-129; No. 2, Minneap. 89-90; No. 1 flaxseed, Minneap. 211-223.

Maine sacked Green Mountain potatoes \$2.25-\$2.50 per 100 pounds in eastern markets; $\$1.87\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites \$1.80-\$1.95 carlot sales in Chicago; \$1.65 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.50-\$2.60 carlot sales in Chicago. New York Yellow onions 50¢-75¢ per 50-pound sack in the East; 58¢-60¢ f.o.b. Rochester. Midwestern stock 50¢-75¢ in city markets; 50¢ f.o.b. Grand Rapids. New York Danish type cabbage 60¢-85¢ per 50-pound sack in terminal markets; sacked per ton \$20-\$22 f.o.b. Rochester. South Carolina Pointed type \$1.10-\$1.50 per $1\frac{1}{2}$ -bushel hamper in city markets. Maryland and Delaware Jersey type sweet potatoes 75¢-90¢ per bushel basket in city markets. Tennessee Nancy Halls \$1.25-\$1.35 in the Middle West. New York U.S.#1, $2\frac{1}{2}$ inch minimum, Rhode Island Greening apples \$1.25-\$1.50 per bushel basket in New York; McIntosh \$1.65-\$1.87 $\frac{1}{2}$ and Baldwins \$1.37 $\frac{1}{2}$ -\$1.50 in New York.

The average price for Middling 7/8 inch spot cotton in the ten designated markets declined 12 points from the previous close to 12.64 cents per pound. On the same day last year the price was 11.73 cents. December future contracts on the New York Cotton Exchange declined 10 points to 12.56 cents and on the New Orleans Cotton Exchange declined 11 points to 12.55 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, $33\frac{3}{4}$ cents; 91 Score, $33\frac{1}{2}$ cents; 90 Score, $33\frac{1}{4}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, $19\frac{1}{2}$ cents; S.Daisies, 18-18 $\frac{1}{4}$ cents; Y.Americas, $18\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, $34\frac{1}{2}$ -35 cents; Standards, 34 - $34\frac{1}{2}$ cents; Firsts, 32 - $32\frac{1}{2}$ cents. (Prepared by BAE)

*Prices basis ordinary protein.

DAILY DIGEST

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Vol. LXIII, No. 64

Section 1

December 15, 1936

FARM TENANCY PROBLEM William B. Bankhead, speaker of the House, described the farm tenancy problem yesterday as "the paramount challenge to the next Congress". Simultaneously, Sen. John H. Bankhead, brother of the speaker, said he would reintroduce a bill to set up government machinery for financing farm purchases by tenants on a low interest rate and long-term payment basis. Rep. Marvin Jones of Texas is co-sponsor of the proposal. (A.P.)

NEW CUBAN CONSTITUTION A Havana report by the United Press says the Senate last night adopted unanimously the draft of the new Cuban constitution, regarded as one of the most radical in the Americas. It also approved appended legislation which provides for election of delegates to a constituent assembly to meet within six months to accept or reject the draft. Socialistic and nationalistic in character, the constitution provides for expropriation of private property, social security and measures tending to break up large land holdings. Eventual complete nationalization of labor also is provided.

CANADIAN FARM GRADES An Ottawa report by the Canadian Press says that cooperative efforts by the Dominion and Provincial governments to minimize marketing and distribution costs and provide an efficient grading system for farm products were decided upon at the meeting of agricultural ministers yesterday. J. G. Gardiner, federal minister, outlined the proposed reorganization of the federal department and obtained approval of the delegates.

TVA POWER INJUNCTION A temporary injunction imposing limitations on expansions and extensions of power facilities of the Tennessee Valley Authority was granted to nineteen utilities yesterday pending disposal of their suit attacking constitutionality of the TVA. Judge Gore said that the restraining order would not interfere with the authority's construction of dams nor terminate electric service to consumers now receiving TVA power. Expansions and extensions will not be permitted, however, except on the projects exempted specifically. (A.P.)

XMAS TRADE Christmas trade throughout the country showed an average increase of 10 percent over a year ago for the first ten shopping days of this month, according to the results of a telegraphic survey of member stores announced yesterday by the National Retail Dry Goods Association. (Press.)

December 15, 1936

Tenmarq
Wheat

The leading article in the December 9 issue of North-western Miller is "Tenmarq" by A. W. Erickson. An editor's note says: "What is the future of Tenmarq wheat, so interestingly discussed by Mr. Erickson in this article? Since 1917, when Prof. John H. Parker, of Kansas State College, successfully crossed Marquis, one of the finest spring wheats, with Turkey type hard red winter, every step in the growth and advance of new wheat has been supervised and studied by officials of the college. This year several hundred thousand acres were seeded to the new wheat. Next year, who knows? Meanwhile, at least one Kansas miller, the Hogan Milling Company, of Junction City, this year paid a specific premium of two cents per bushel for Tenmarq, not only because it regarded this wheat as worth the money for milling but to stimulate growth in acreage. Going even beyond that, it is making, as yet in a limited way, a bakers' flour exclusively from Tenmarq. Operative millers, to be followed probably by mill owners, are inclined to resist the idea of milling flour from special varieties of wheat. But is this development likely to follow? What is the future of Tenmarq, legitimate offspring of the two greatest quality rivals among the country's bread wheats?"

Control of
Six in Fish

Control of sex determination in animals, long an absorbing problem to biologists, promises to be less of a mystery following recent experiments in fish breeding by Dr. A. W. Bellamy, zoologist of the University of California. Two small species of subtropical fish, known as Platypoecilus maculatus and variatus, respectively, have yielded through hybridization the unusual results recently reported by Dr. Bellamy. The maculatus fish, a chunky little creature about two inches long, carries its sex-determining factor in the female. On the contrary, as in many common animals, the variatus appears to control sex through the male. Dr. Bellamy crossed these two species of fish and fortunately obtained fertile hybrids. Such hybrids, crossed by a certain scheme with one of the original species, produced nothing but males. A most promising research program has been opened, in which not only the all-male progeny will be studied, but also other progeny which are of unbalanced sex ratio; also certain finny offspring in which both male and female offspring in which both male and female characters have been combined in one creature. The fact that a life generation of these fish spans but a few months enables more prompt answers to genetic questions than in the case of many larger animals. (Science News Letter, December 12.)

Business
Report

A marked improvement in business was reflected in the final report by the Census Bureau recently in its biennial tabulation of retail sales throughout the country, which showed them as being 67.5 percent of the 1929 level, whereas in 1933 they showed a drop of 49 percent from 1929. The final tabulation put retail sales in 1935 at \$33,161,276,000, a gain of 32.4 percent over the 1935 sales of \$25,037,225,000. (Press.)

December 15, 1936

Civil Service Examinations The Civil Service Commission announces the following examinations, unassembled: associate entomologist, \$3,200. assistant entomologist, \$2,600 (optional subjects, 1. apiculture, 2. forest entomology) Bureau of Entomology and Plant Quarantine; assistant librarian, \$2,600, Department of Labor. Applications must be on file not later than: (a) January 14, from Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming; (b) January 11, from states other than those in (a).

Nutrition Committee "The recommendations of the second committee on nutrition were accepted by the assembly of the League of Nations last month," says an editorial in Food Manufacture (London, December). "While international cooperation as to the exchange of ideas and in the organization of agricultural produce are looked forward to as something for the future, the main tenor of this report seems to be the urging of individual national action as the first step. The recommendations will therefore be passed on to the various governments...One set of recommendations deals with improving the scientific basis of nutritional policies...Another section pleads for a consideration of the dietary needs of special sections of the community, expectant and nursing mothers, children and the unemployed...Finally, the recommendations impinge on economic aspects and governments are asked to take steps to make food supplies, especially protective foods, available at prices within the reach of all. The committee recommends closer collaboration between producers' and consumers' organizations and the evolution of agricultural production in order to satisfy the requirements of sound nutrition. Governments are recommended to set up bodies under their control and in contact with scientific institutions, to be centers of research, study and propaganda, 'a center where the recommendations and principles laid down by experts can be adapted to national conditions'..."

"Certified Quality" "To style appeal, service and consumer satisfaction Marshall Field & Company's manufacturing division now adds the 'Fieldcrest Certified Quality Plan'," reports Business Week (December 12). "First on 17 major lines...later on its entire production output, Field's will place quality labels, providing specific information in terms of established standards about serviceability of goods. Concerning the Fieldcrest Golden Gate sheets, for example, the labels describe how they are 'woven with 140 threads per square inch (standard 68 X 72 utility grade) muslin sheeting,' how they will withstand a 75-pound pull, exceeding U.S. government specifications by 5 pounds, how they are made of strong durable fabric weighing 5.3 ounces per square yard (4.7 ounces is average)..."

Rural New England The decline and fall of rural New England, which has been predicted and lamented for the past few decades, will never be a reality, Dr. Harold Fisher Wilson declares in a survey of the social and economic history of northern New England recently published by the Columbia University Press. Desereted farmhouses are the result of readjustment to modern conditions, he points out and do not signify the decline of the New England community. (Press.)

Section 3
MARKET QUOTATIONS

- - -

December 14 -- Livestock At Chicago (Closing Quotations):
 Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.25-12.00; cows good 5.25-6.25; heifers 550-750 lbs good and choice 8.50-12.00; vealers good and choice 9.50-11.00; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.50-10.15; 200-250 lbs good and choice 9.90-10.25; 250-350 lbs good and choice 9.90-10.25; slaughter pigs 100-140 lbs good and choice 8.25-9.40. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.25-9.00.

Grain: No. 1 D.No.Spr.Wheat* Minneap. 149 7/8-151 7/8; No. 2 D. No.Spr.* Minneap. 148 7/8-150 7/8; No. 2 Am.Dur.*Minneap. 144 7/8-148 7/8; No. 1 Hard Amber Durum, Duluth, 150 7/8-158 7/8; No. 2 Hard Winter* K.C. 129-136; Chi. 133 $\frac{1}{4}$ -137 $\frac{1}{2}$; St. Louis 135-137; No. 2 S.R.Wr. St. Louis 137 $\frac{1}{2}$; No. 1 W.Wh. Portland 112; No. 2 rye, Minneap. 104 $\frac{3}{4}$ -111 $\frac{3}{4}$; No. 2 yellow com, K.C. 113 $\frac{1}{4}$ -117 $\frac{1}{2}$; St. Louis 109; No. 3, Chi. 105 $\frac{1}{2}$ -109 $\frac{1}{4}$; No. 3 white oats, Minneap. 50 7/8-52 7/8; K.C. 54-57; Chi. 51-53; St. Louis 52 $\frac{1}{2}$; No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 121-129; No. 2, Minneap. 91-92; No. 1 flaxseed, Minneap. 210-220.

Maine sacked Green Mountain potatoes \$2.35-\$2.50 per 100 pounds in eastern cities; Wisconsin sacked Round Whites \$1.85-\$2 carlot sales in Chicago; \$1.65-\$1.69 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.50-\$2.65 carlot sales in Chicago; \$1.75-\$1.80 f.o.b. Idaho Falls. Florida Bliss Triumphs \$2-\$2.25 per bushel crate in eastern cities; \$1.75 f.o.b. Belle Glade. New York Yellow onions 50¢-80¢ per 50-pound sack in terminal markets; 52¢ f.o.b. Rochester. Midwestern stock 55¢-85¢ in consuming centers; 47 $\frac{1}{2}$ ¢-50¢ f.o.b. West Michigan points. New York Danish type cabbage 60¢-85¢ per 50-pound sack in city markets; sacked per ton \$20-\$22 f.o.b. Rochester. South Carolina Pointed type 85¢-\$1.50 per 1 $\frac{1}{2}$ -bushel hamper in city markets. Texas Round Type \$2.15-\$2.50 per lettuce crate in city markets. New York, U.S. #1, 2 $\frac{1}{2}$ inch minimum, Rhode Island Greening apples \$1.25-\$1.35 per bushel basket in New York; \$1.10 f.o.b. Rochester. New York McIntosh \$1.75-\$1.85 and Baldwins \$1.25 in New York.

The average price for Middling 7/8 inch spot cotton in the ten designated markets advanced 4 points from the previous close to 12.81 cents per pound. On the same day last year the price was 11.40 cents. March future contracts on the New York Cotton Exchange advanced 5 points to 12.43 cents and on the New Orleans Cotton Exchange advanced 6 points to 12.41 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, 33 $\frac{1}{2}$ cents; 91 Score, 33 $\frac{1}{4}$ cents; 90 Score, 33 cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, 19 $\frac{1}{2}$ cents; S.Daisies, 18-18 $\frac{1}{4}$ cents; Y.Americas, 18 $\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, 33 $\frac{1}{2}$ cents; Standards, 33 cents; Firsts, 31-31 $\frac{1}{2}$ cents.
 (Prepared by BAE)

*Prices basis ordinary protein.

DAILY DIGEST

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Vol. LXIII, No. 65

Section 1

December 16, 1936

LENDING
AGENCIES

A detailed study of the administration's lending agencies, to determine the need of extending some which soon expire, was started yesterday by Secretary Morgenthau, acting as chairman of the Interdepartmental Committee for Coordinating the Various Credit Units. Jesse R. Jones, chairman of the Reconstruction Finance Corporation, was one of several officials called into conference by the Secretary. (Press.)

RUBBER
REGULATION

A London report by the Associated Press says the International Rubber Regulation Committee yesterday fixed permissible exports of the commodity from producing areas for the first quarter of 1937 at 75 percent of basic quotas and for the second quarter at 80 percent. The new figures are increases of 5 percent over those fixed on October 27.

JEWISH LAND
SETTLEMENT

A Jerusalem wireless to the New York Times says that, continuing testimony before the Royal Commission yesterday, Dr. Maurice B. Hexter, Jewish colonization leader, summed up Jewish grievances and demands regarding settlement on the land. These include a complaint that survey and settlement of titles to land which are scheduled by the government to take 30 to 40 years to complete are requiring entirely too long and that the work should be accelerated. Jews demand that the government assist cooperatives and that long-term loans of 20 to 25 years at 4 percent be given by the government to cooperative land societies.

NEW YORK
HIGHWAYS

To meet increased automobile traffic, Col. Frederick Stuart Greene proposes to ask the New York State Legislature in 1937 for an appropriation of \$150,000,000 for building of four-lane highways on important state routes and to renew his demands that gasoline money from taxes be used exclusively for roads. Four-lane highways for most of the roads, and six-lane ones to be built when needed, are features of the plan. Safety lanes, or parkways, would be established in the middle of each four-lane road to divide traffic. (New York Times.)

December 16, 1936

Cotton Picking Major obstacles are in the way of any mechanical cotton Machines picking machine, according to a statement by the Texas State Agricultural and Mechanical College. One of the principal factors that stands in the way is that cotton, even in a single field, does not all open at one time and that all of it must be well open to make it practical and economical to use machine pickers. "There is little doubt," the report said, "that machines can be developed which will gather cotton more rapidly and with fewer laborers but the cotton must be pretty well open before it will pay to put in machines. By that time the lint will have deteriorated considerably, regardless of weather. Experiments by Mary Anna Grimes, of the State Experiment Station, show that weathering cotton in the field due to delay in harvesting, results in damage to the fibre that is more serious than generally thought. "Waiting for the crop to open fully to make machine harvesting successful may result in losses that are greater than the gains which might be expected from the less expensive machine harvesting." (Wall Street Journal.)

Nicotine in A "tailor-made" process for reducing the nicotine content of tobacco was described recently by Dr. P. M. Gross, Tobacco chairman of the Duke University Department of Chemistry, in an address at the University of Richmond. He said that ethylene oxide, first used successfully in a war on the injurious tobacco beetle, will reduce nicotine content to 1.1 percent without seriously changing the aromatic qualities of the weed.

Processing M. Slade Kendrick, Cornell University, is author of Tax on Wheat "The Processing Tax on Wheat" in the American Economic Review (December). An abstract of the article says: "This tax illustrates the other side of the doctrine that 'the power to tax is the power to destroy'. The processing of wheat was taxed 30 cents a bushel, or 51 percent of the value of this grain at the time of the initial levy of the tax, not to cripple the industry of growing wheat but to aid it. This tax was on the whole collected efficiently, despite the difficulties that arose in its administration. Moreover, as measured by the ratio of the tax liability for processing wheat, to the number of bushels processed, the effectiveness of the administration of this tax was improved considerably by the Bureau of Internal Revenue in the second year of its levy. A large revenue was realized in both years. The economic effects of the processing tax on wheat were: a shifting forward of the burden of the tax; a small decline in the consumption of wheat; and possibly some contribution to economic recovery through the redistribution of credit resources brought about by the tax."

Sociological Rural Sociology (December) contains the following Articles articles: California Farm Labor, by Paul S. Taylor and Tom Vasey; The Japanese Rural Community, by Fred R. Yoder; Rural Families on Relief, by Thomas C. McCormick; A Registration System and Internal Migration, by Conrad Taeuber; The Marriage Rate in Rural North Carolina, by C. Horace Hamilton; Status and Migration, by Herbert Day Lamson; The AAA and the Cropper, by Fred C. Frey and T. Lynn Smith.

December 16, 1936

Improvement
of Grain

"Slowly but surely wheat, corn and other grain crops are moving forward to higher and higher quality and increased yields," says Grain & Feed Journals (December 9).

"At the first International Grain and Hay Show held in connection with the International Live Stock Exposition in 1919, a 64.5 pound wheat won the grain championship and the title of 'wheat king' for J. C. Mitchell, of Dahinda, Saskatchewan. In 1921 the title was won with a sample of 63.3 pounds of wheat exhibited by G. W. Kraft, of Bozeman, Montana. From that point on the test weights of the winning wheats became heavier and heavier, with few setbacks. Nothing less than a 66 pound wheat has been able to win the crown since the 1930 showing of a 67.5 pound sample of hard red spring Reward wheat placed Herman Trelle for the second time at the head of the list. This year the Trelle name won for the fifth time with a 66.3 sample of the same kind and variety of wheat. Oats also show the influence of the international and other agricultural shows in the constant improvement of test weights. The list of past grand champions show samples of 45, 46 and 48 pounds oats, but the trend in test weights has been constantly upward. Herman Trelle's 51 pound Victory oats this year stand at the head of the list..."

Harvard Radio
Meteorograph

Harvard's weather scientists have proved the usefulness of a "gadget" they have been nursing along for two years, the radio meteorograph, says a Cambridge report to the New York Times. The Harvard radio meteorograph weighs only a pound or so, but when attached to a free traveling balloon it ascends to heights of 20 miles or more, reporting back automatically every few seconds records of temperature, humidity and atmospheric pressure by radio to a ground station, where the signals are taken down mechanically on a revolving drum. Its chief advantage over the weather plane, now generally used for upper air work, was indicated recently, observers said, when the instrument soared aloft through the fog before dawn, leaving the airplanes useless in their hangars and sending back steady and reliable data up to 20,000 or 30,000 feet. Another feature of the balloon equipment is its ability to climb high above the ceiling attained by the planes, thus obtaining a more complete report.

Italo-German
Danubian Pact

Accords between Germany and Italy to split up business in the Danubian States and to exchange goods rather than money were announced recently, says a Rome report by the Associated Press. Under the accords, further allying the two authoritarian states, traffic out of the Danubian area will be "coordinated". Germany will reciprocate present economic privileges by granting the same privileges to Italian colonies and foreign exchange between the two nations will be balanced by merchandise. They will not be compelled to send out carefully regulated currency.

California

Wine Consumption

Consumption of wine in California during the 1935-36 season was about 3 1/2 gallons per capita as compared with an average of only about 0.7 of a gallon for the United States as a whole, according to S. W. Shear, association agricultural economist on the Giannini Foundation of the University of California. Wine consumption in the United States has increased with unexpected rapidity since repeal and this season's prices for the various vintages are strengthening as a result. (Press.)

Section 3
MARKET QUOTATIONS

December 14 -- Livestock at Chicago (Closing Quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.25-12.00; cows good 5.25-6.25; heifers 550-750 lbs good and choice 3.50-12.00; vealers good and choice 9.50-11.00; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.40-9.95; 200-250 lbs good and choice 9.80-10.05; 250-350 lbs good and choice 9.85-10.05; slaughter pigs 100-140 lbs good and choice 8.10-9.25. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.25-9.00.

Grain: No. 1 D.No.Spr.Wheat* Minneap. 149 $\frac{1}{2}$ -151 $\frac{1}{2}$; No. 2 D.No.Spr.* Minneap. 148 $\frac{1}{2}$ -150 $\frac{1}{2}$; No. 2 Am.Dur.* Minneap. 144 $\frac{1}{2}$ -148 $\frac{1}{2}$; No. 1 Hard Amber Durum Duluth, 150 $\frac{1}{2}$ -158 $\frac{1}{2}$; No. 2 Hard Winter* K.C. 132-137 $\frac{3}{4}$; Chi. 135 $\frac{1}{2}$ -138 $\frac{1}{2}$; St. Louis 137 $\frac{1}{2}$ -138; No. 2 S.R.Wr. St. Louis 137 $\frac{1}{2}$ -138 $\frac{1}{2}$; No. 1 W.Wh. Portland 111 1/8; No. 2 rye, Minneap. 106 $\frac{3}{4}$ -111 $\frac{3}{4}$; No. 2 yellow corn, K.C. 113 $\frac{3}{4}$ -115 $\frac{1}{2}$; St. Louis 108 $\frac{1}{2}$ -109; No. 3, Chi. 105 $\frac{1}{4}$ -107 $\frac{3}{4}$; No. 3 white oats, Minneap. 50 1/6-52 1/8; K.C. 55-57; Chi. 51-52; St. Louis 52; No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 121-129; No. 2 Minneap. 91-92; No. 1 flaxseed, Minneap. 216 $\frac{1}{2}$ -228 $\frac{1}{2}$.

Maine sacked Green Mountain potatoes \$2.35-\$2.55 per 100 pounds in Eastern cities; \$1.92 $\frac{1}{2}$ -\$1.97 $\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites fair quality \$1.80 carlot sales in Chicago; \$1.62-\$1.65 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.50-\$2.75 carlot sales in Chicago; \$1.75-\$1.80 f.o.b. Idaho Falls. Florida Bliss Triumphs \$1.75-\$2.25 per bushel crate in city markets; \$1.35-\$1.50 f.o.b. Belle Glade. New York Yellow onions 55¢-75¢ per 50-pound sack in city markets; Mid-western stock 50¢-80¢ in consuming centers; 50¢-f.o.b. Grand Rapids. New York Danish type cabbage 50¢-90¢ per 50-pound sack in terminal markets; sacked per ton \$19-\$21 f.o.b. Rochester. South Carolina Pointed type 93¢-\$1.50 per 1 $\frac{1}{2}$ -bushel hamper in city markets. Texas Round type \$2.25-\$2.50 per lettuce crate in consuming centers; \$1.35-\$1.50 f.o.b. Lower Rio Grande Valley points. East Shore Maryland and Delaware Jersey type sweet potatoes 75¢-\$1.15 per bushel basket in the East. Tennessee Nancy Halls \$1.25-\$1.50 in the Middle West. New York, U.S.#1, 2 $\frac{1}{2}$ inch minimum McIntosh apples \$1.65-\$1.85 and Rhode Island Greenings \$1.25-\$1.37 $\frac{1}{2}$ per bushel basket in New York.

Average price Middling 7/8 inch cotton in ten designated markets declined 12 points from the previous close to 12.69 cents. On the same day one year ago the price was 11.51 cents. March futures contracts on the New York Cotton Exchange declined 11 points to 12.32 cents and on the New Orleans Cotton Exchange declined 15 points to 12.26 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, 34 cents; 91 Score, 33 $\frac{3}{4}$ cents; 90 Score, 33 $\frac{1}{2}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, 19 $\frac{1}{2}$ cents; S.Daisies, 13-18 $\frac{1}{4}$ cents; Y.Americas, 18 $\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, 33 $\frac{1}{2}$ cents; Standards, 33 cents; Firsts, 31-31 $\frac{1}{2}$ cents. (Prepared by BAE)

*Prices basis ordinary protein.

DAILY DIGEST

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Vol. LXIII, No. 66

Section 1

December 17, 1936

U.S.-ITALIAN TRADE PACT A Rome wireless to the New York Times by Arnoldo Cortesi says: "William Philips, United States Ambassador and Foreign Minister Galeazzo Ciano signed at the Palazzo Chigi yesterday an agreement reciprocally rescinding the old Italo-American commercial treaty which had regulated trade between the two countries since 1871. A new treaty has been under discussion for some months and is now approaching completion..."

ARGENTINE WHEAT CROP A Buenos Aires report by the United Press says the Ministry of Agriculture last night estimated the 1936-37 Argentine wheat crop at 6,800,000 metric tons (249,854,666 American bushels). Other crops were estimated as follows: linseed, 75,357,-236 bushels; oats, 56,492,875 bushels; barley, 31,231,833 bushels; rye, 8,857,767 bushels; and birdseed, 30,000 tons. These figures showed a general increase of 6.8 percent over the crops for the preceding year.

ELECTRIC POWER HIGH Electric power production, as reported by Edison Electric Institute, reached a new high since the records have been kept. The output was 2,278,303,000 kilowatt hours, an increase of 1.6 percent over 2,243,816,000 hours produced last week, and 14.9 percent higher than the 1,983,431,000 kilowatt hours recorded in the same week last year. (A.P.)

EXPORT BALANCE The smallest export balance in many years was forecast for 1936 yesterday by Commerce Department foreign trade experts who said the maritime strike was substantially responsible. Not in 40 years has the excess of exports over imports run less than \$100,000,000. A drop below that figure, they said, was an inevitability for the current 12 months. (A.P.)

MARYLAND FISH & GAME The Maryland sportsmen's legislative committee will ask the 1937 general assembly to give the State Conservation Commission power to open or close the fish and game seasons in accordance with the available supply of fish and game. The proposal was adopted by the committee night before last. It will be drafted and presented to the legislature which meets in January. (A.P.)

December 17, 1936

Localization of Weather Forecasts "Pine operators in California express considerable satisfaction with the localization of fire weather forecasting tested this year for the first time in the pine region of northern California," says West Coast Lumberman (December). "Two main experiment stations were established this year, one at Westwood and the other at Camino. From these two points, the Red River Lumber Company and the Michigan-California Lumber Company, wired daily weather reports to the U.S. Weather Bureau Station at Mt. Shasta. This station, in turn, would wire back if it seemed probable there would be a change in fire weather conditions which might occur within 48 hours... It is expected that in 1937 this work will be extended in California and that it also will be inaugurated in Oregon. California operators also report much satisfaction from the use of radio to keep truck fire fighting crews in touch with lockouts, thus giving the truck units immediate location of any fire that started. These truck crews, varying in size to fit local conditions, were composed of experienced fire fighters and had equipment on hand to bring a fire under control if caught in the early stages. For example, it is reported that this year a fire which started a mile away from a protection system road, was brought under control by a truck crew before it burned an acre, even though a 60-mile wind was blowing."

Express Highways The eleventh of a series of articles on current highway problems in Engineering News-Record (December 10) is "Express Highways" by John S. Worley, University of Michigan. An editor's note says: "America has been too busy building travelable highways to consider very seriously the building of different highways for different classes of travel. As we progress, however, the idea is emerging and in the minds of many transportation students has reached the goal of positive pronouncement. A few weeks ago (ENR Nov. 12) in this series of articles E. C. Lawton pointed out the warrant for intercity arterial roads and indicated their requirements. In this article Prof. John S. Worley goes a step farther and reasserts his claim of the justification for long-distance express highways."

Oxidation of Soil Humus In the Journal of the (British) Royal Horticultural Society (September) C. B. Greening, Wisley Laboratory, reports on "The Oxidation of Soil Humus; Preliminary Trials with Potassium Permanganate." He says in part: "A variety of materials, when applied to the soil, will increase its supply of organic matter, but a simple and economical means of promoting the decomposition of soil humus, is obviously of wide practical value. In pure organic chemistry, the fact has been known for many years that potassium permanganate will decompose organic matter... Accordingly, in 1931, the writer began some garden trials with the object of ascertaining, in practice, whether or not an application of potassium permanganate to the soil would decompose the organic matter already present in the soil, through the formation of nitric acid, thus causing the production of nitrates and other plant foods within the soil itself in quantities sufficient to stimulate plant growth... In view of the promising nature of the preliminary work done, arrangements were duly made this season by the Royal Horticultural Society to enable the writer to carry out further work..."

December 17, 1936

World Tariff Bargaining Overseas Trader (December) contains the final installment of a copyright article by George P. Auld, "Rebuilding Trade by Tariff Bargaining". He says: "A survey of the provisions of the individual agreements offers impressive evidence of the intelligence and care with which our government over the past two years has used the powers accorded to it by the tariff bargaining legislation. On the face of the agreements themselves it would be reasonable to conclude that concessions have been obtained which will be of substantial value to our agriculture and other industries dependent on or capable of supplying foreign markets, and that the concessions granted in the form of reductions in our own tariffs are such as will create a minimum of disturbance to our protected industries. It seems a wholly reasonable assumption that resulting trade increases, though here and there involving minor displacements of protected production for the domestic market by production for export, will represent in much more substantial measure an absolute increase in production and profitable merchandising, induced by increased attractiveness of prices to consumers. Such conclusions though *prima facie* reasonable and tentatively confirmed by recent trade figures, must await the test of recorded results of a more comprehensive character than those now available..."

Sugar Cane Breeding A. J. Mangelsdorf, geneticist of the experiment station of the Hawaiian Sugar Planters Association, is author of "Sugar Cane Breeding in Hawaii" in Facts About Sugar (December). He says in part: "Experiment stations workers discovered a few years ago that the addition of a small amount of sulphur dioxide to the water in which the cut tassels are placed has the effect of keeping them fresh and in good condition for many days. More recently it has been found that the addition of phosphoric acid to the sulphur dioxide solution further increases its effectiveness. When cut tassels are placed in this solution they behave normally in every respect, shedding their pollen and ripening their seeds just as though they had never been severed from their roots. The solution loses its strength upon standing and must be replenished at intervals of two or three days. All that needs to be done is to place several tasseling stalks of each of the two parent varieties together in a pail of the solution after which nature takes its course... During the past eight years hundreds of thousands of seedlings have been grown from tassels crossed in this way. Surprisingly enough, the crosses made with the aid of the solution usually germinate more satisfactorily than do the natural field crosses."

Soybean Progress "The soybean continues to amaze observers of agricultural progress," says an editorial in Country Home (December). "The acreage in less than thirty years has grown a hundred times. Now more than five and a half million acres of farm land are growing soys. Last year 272,745 tons of beans were crushed, 25 times as many as only ten years ago. The cake has become a preferred ingredient in feed mixtures. The oil and protein products of the beans go into enamels, paints, printing materials, glues for plywood and other purposes, into the sizing and coating of papers, for waterproofing, for sand binder in foundries, into the making of plastic substances. More new uses come to light almost every month..."

December 17, 1936

Section 3
MARKET QUOTATIONS

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Dec. 16 -- Livestock at Chicago (Closing Quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.50-12.25; cows good 5.25-6.25; heifers 550-750 lbs good and choice 8.75-12.00; vealers good and choice 9.50-11.00; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.40-10.05; 200-250 lbs good and choice 9.90-10.20; 250-350 lbs good and choice 9.95-10.20; slaughter pigs 100-140 lbs good and choice 8.10-9.35. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.25-8.90.

Grain: No. 1 D.No.Spr.Wheat* Minneap. $149\frac{3}{4}$ - $151\frac{3}{4}$; No. 2 D.No.Spr.* Minneap. $148\frac{3}{4}$ - $150\frac{3}{4}$; No. 2 Am.Dur.* Minneap. 145-149; No. 1 Hard Amber Durum, Duluth, 151-159; No. 2 Hard Winter* K.C. $131\frac{1}{2}$ -137; Chi. 135- $137\frac{3}{4}$; St. Louis $137\frac{1}{2}$; No. 2 S.R.Wr. St. Louis $136\frac{1}{2}$; No. 1 W.Wh. Portland $111\frac{1}{2}$; No. 2 rye, Minneap. $109\frac{5}{8}$ - $116\frac{5}{8}$; No. 2 yellow corn, K.C. $113\frac{1}{2}$ - $115\frac{1}{2}$; St. Louis 109; No. 3, Chi. 106- $107\frac{1}{2}$; No. 3 white oats, Minneap. $50\frac{1}{4}$ - $52\frac{1}{4}$; K.C. $54\frac{1}{4}$ - $55\frac{1}{2}$; Chi. $50\frac{3}{4}$ -52; St. Louis $51\frac{1}{2}$; No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 121-29; No. 2 Minneap. 91-92; No. 1 flaxseed, Minneap. 217-229.

Maine sacked Green Mountain potatoes \$2.35-\$2.50 per 100 pounds in eastern cities; $\$1.92\frac{1}{2}$ - $\$1.97\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites \$2 carlot sales in Chicago; \$1.60 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.45-\$2.75 carlot sales in Chicago; \$1.75-\$1.90 f.o.b. Idaho Falls. New York Yellow onions 65¢-75¢ per 50-pound sack in the East; 55¢-58¢ f.o.b. Rochester. Midwestern stock 50¢-80¢ in terminal markets. New York Danish type cabbage 55¢-90¢ per 50-pound sack in city markets; sacked per ton \$19-\$21 f.o.b. Rochester. South Carolina Pointed type \$1-\$1.40 per $1\frac{1}{2}$ -bushel hamper in consuming centers. Texas Round type \$2-\$2.50 in a few markets, per lettuce crate; \$1.20-\$1.35 f.o.b. Lower Rio Grande Valley Points. New York, U.S. #1, $2\frac{1}{2}$ minimum, Rhode Island Greening apples \$1.25-\$1.37 $\frac{1}{2}$ per bushel basket in New York; \$1.10-\$1.15 f.o.b. Rochester. New York McIntosh \$1.50-\$1.85 in New York; \$1.60 f.o.b. Rochester.

The average price for Middling 7/8 inch spot cotton in the ten designated markets advanced 1 point from the previous close to 12.70 cents per pound. On the same day last year the price was 11.46 cents. March future contracts on the New York Cotton Exchange remained unchanged at 12.32 cents and on the New Orleans Cotton Exchange advanced 3 points to 12.29 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, $3\frac{41}{4}$ cents; 91 Score, 34 cents; 90 Score, $33\frac{3}{4}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, $19\frac{1}{2}$ cents; S.Daisies, $18\frac{1}{2}$ cents; Y.Americas, $18\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, $33\frac{1}{2}$ cents; Standards, 33 cents; Firsts, $31\frac{1}{2}$ cents. (Prepared by BAE)

*Prices basis ordinary protein.

DAILY DIGEST

Prepared in the Press Service, Office of Information, United States Department of Agriculture, for the purpose of presenting all shades of opinion as reflected in the press on matters affecting agriculture, particularly in its economic aspects. Approval or disapproval of views and opinions quoted is expressly disclaimed. The intent is to reflect the news of importance.

Vol. LXIII, No. 67

Section 1

December 18, 1936

FARM TENANCY
COMMISSION

A many-sided national program aimed at improving the status of tenant farmers, without attempting to convert great numbers of them into land owners, appeared to be favored yesterday by most members of the National Tenancy Commission. As the group ended a two-day organization session, spokesmen said there probably would be a series of regional meetings before a report was handed to President Roosevelt sometime before February 1. (A.P.)

CANADIAN DROUGHT-
RESISTANT WHEAT An Edmonton, Alberta, report by the Associated Press says development of a drought-resisting wheat hardy enough to withstand permanent wilting during a severe heat wave, was announced yesterday at the University of Alberta. The new wheat strain was also credited with good milling qualities and cereal qualities. It is named "canus", after varieties of Canadian and United States wheat. Dr. O. S. Aamodt began his experiment only six years ago.

INDUSTRY AND
AGRICULTURE

L. F. Livingston, manager of the agricultural extension department of E. I. du Pont de Nemours & Company, said yesterday in an address that "industry depends upon a prosperous agriculture as a market for manufactured goods and agriculture depends likewise upon a market created by industry and the millions of workers which it employs." "The employment of farm products in industry is becoming increasingly important to agriculture, and is certain to be extended in the future," he asserted, adding that it was estimated that industry, within ten years, would need the products of 50,000,000 additional acres and that the du Pont Company alone now was using the products grown on 4,000,000 acres of American farm lands. (New York Times.)

PERMANENT
CCC URGED

President Roosevelt ^{was} said yesterday to have decided to recommend that Congress make the Civilian Conservation Corps a permanent agency of the government. His decision was announced by Robert Fechner, director of the CCC, after the latter had spent an hour in the Executive offices. The President said long ago that he hoped to take this action and Mr. Fechner stated that Mr. Roosevelt had decided to translate the hope into action. (Press.)

December 18, 1936

Grass
Drying

"One of the developments in farming practice during the past year is the application of the scientific research which showed the exceptional qualities of dried grass as a winter feed for cattle and other farm stock," says *The Field* (London, December 5). "Reference is made on a previous page to the extraordinary benefits to the herbage, and incidentally the production of good quality grass for drying through the folding of poultry over grassland. With the rise in the cost of feedingstuffs such as oilcakes, maize and other imported products, many more farmers are seriously considering whether they should not decide to invest in a grass-drying plant which will enable them to save a good deal of the surplus herbage of the summer months which now goes to waste. It has been shown that dairy cows and other cattle will thrive well on dried grass, and if the concentrated part of their ration can be produced on the farm there is prospect of a considerable economy in feeding costs."

Electricity
in Farm
Management

Agricultural Engineering (December) prints an address by Hobart Beresford, University of Idaho, on "Electricity in Better Farm Management". He says in part: "In connection with the federal rural electrification survey authorized under the Federal Power Commission,, we find a classification of farms for the purpose of determining the electrical energy consumption on various types of farms. This classification was made for the purpose of determining what a completely electrified farm might use on a 12-month basis. Through the cooperation of the Idaho Power Company typical farms were selected in various parts of the state and an inspection made of the connected loads on these farms, the power used annually and the cost of this power. This study revealed that completely electrified dairy farms led the list in energy consumption with a total of 10,000 kwh annually. Contrary to expectations, the self-sufficing farm used 2,500 kwh as compared with cash grain farm consumption of 1,500 kwh, which was the lowest. The truck farm used 3,500 kwh; the stock ranch, 5,000 kwh; the general farm, 5,500 kwh; the crop specialty farm, 6,000 kwh; fruit and poultry farms, 7,000 kwh each; and the animal specialist farm, 8,500 kwh. These energy consumptions are, in general, the average of five completely electrified farms of each type, widely distributed throughout the state. In the study no attempt was made at the time to determine the farm income..."

Spanish

"Carreteras", a Spanish translation of *Public Roads*, "Public Roads" is soon to be published in Argentina and will be available for circulation in Spanish-speaking countries," says the November issue of *Public Roads*. "A few months ago Ing. J. Allende Posse, head of the national highway organization of Argentina, while inspecting road construction in the United States, expressed a desire to keep the highway engineers of Argentina informed regarding research and methods of construction in this country. Difference in language has been a serious difficulty which he proposed to overcome by publishing *Public Roads* in Spanish. Arrangements have been completed and the first issue of 'Carreteras', which will contain the report that appeared in the March 1936 issue of *Public Roads*, will be published in the near future..."

December 18, 1936

Seedless
Hops

The New York Experiment Station has decided that the cultivation of seedless hops is a paying proposition, says a Geneva report by the Associated Press. Hops containing only one-tenth percentage of seeds were grown this year at the station's "hop yard" at Waterville by removing all male vines. The test was designed to determine the practicability of raising a seedless product and exercising extreme care in picking the crop. Prof. J. D. Harlan, test director, said the experimental crop had sold for 65 cents a pound for the bulk of the state's hops. The nearly seedless condition of the station's hops and the lack of leaves in the marketed product accounted for the premium, he said.

Manure for
Tomatoes

"Growers of glasshouse crops are not alone in their leaning towards phosphatic fertilizers," says the Journal of the Ministry of Agriculture (December, London). "In the past, market gardeners have used heavy dressings for outdoor vegetable crops and many vegetable growers still insist on the need for these heavy applications. With tomatoes, however, there is now definite experimental evidence that bone meal or bone flour at the rate of 1/2 ton per acre need not be used in the base fertilizer more than once in two or even three years, irrespective of whether the soil has been steamed or not. Potash is probably the most important constituent of any base fertilizer. Not only does adequate potash make for good, healthy growth, but it often helps to counter such troubles as blotchy ripening. Sulphate of potash, at the rate of 1/2 ton per acre, is preferable to other forms of potash in view of the susceptibility of tomatoes to injury from chlorides. The nitrogen in the base fertilizer should be in a slowly available form such as 1/2 ton per acre of hoof and horn. Nitrogen can often be omitted, however, on new land, and it is usually unnecessary and may even be harmful on newly steamed soil...The inclusion of phosphate in top dressings is by no means universal, but in view of the recently established connection between the phosphate and potash content of the tomato plant it seems undesirable to omit phosphate altogether, especially in seasons when it is not included in the base fertilizer."

New York
Flower Law

"Beginning January 1, flower seeds offered for sale within New York State will be subject to the same control as now applies to field and vegetable seeds," reports Florists Exchange (December 12). "'This,' says Prof. M. T. Munn, in charge of the seed testing laboratory at the Geneva Experiment Station, 'is a move to protect both the buyer and reliable seedsmen against unscrupulous dealers.' The statute requires among other things that the name and address of the vendor, kind and variety must be on each packet and penalties are provided for misrepresentation. 'It is confidently expected,' concludes Professor Munn in a circular issued recently, 'that the flower seed law will give ample protection to flower growers as well as to the many reliable flower seed growers and specialists who give much attention to flower breeding and who have invested considerable sums in facilities for growing many beautiful and excellent flowers.'"

Air Conditioned December Agricultural Engineering prints a paper on Poultry Houses "Air Conditioned Poultry Brooder Houses" by John E.

Nicholas and E. W. Callenbach, Pennsylvania State College. The summary says: (1) insulation plays an integral part in maintaining desired temperatures and humidities in poultry brooder houses; (2) it was impossible to hold the brooder houses at a temperature of 35 degrees F. without refrigeration, even in winter brooding; (3) there was a wide difference in relative humidity between the 'cold' and 'hot' houses when moisture was not supplied in the latter in the first series; (4) the difference in relative humidities in the 'cold' houses 19 and 20 without additional moisture was but one percent. In the 'hot' houses 21 and 22 with additional moisture in the second series, the difference was 5 percent. This is probably due, in part, to the variation in the number of air changes in the respective houses."

Sliding Scale "A sliding scale for dairy-land rentals that has been Rentals in use in Monterey County, California, for the past three years is gaining popularity, and appears to be quite fair to both landlord and tenant," says Reuben Albaugh, Monterey county agent, in Country Gentleman (December). "This system was worked out after studying dairy leases that had been in effect in this country for over a period of thirty years. This research revealed that the landlord collected about 30 percent of the gross income from butterfat where he furnished the land, buildings and irrigation equipment. Or, in other words, when butterfat is selling f.o.b. the ranch for 25 cents a pound, the tenant pays the landlord \$15 per acre a year for land that would carry one matured dairy cow to each 1.5 acres of land. Using this as a base and keeping in mind the carrying capacity of the ranch, the system of rental charge can be very satisfactorily applied to most ranches. If 25-cent butterfat would pay \$15 per acre rent, 30-cent butterfat would return \$18 per acre. This is arrived at by multiplying 15 by 30 and dividing by 25. This system is used on at least 15 large ranches in this county..."

Texas Sudan "...The Texas Experiment Station announced breeding Experiments work to improve Sudan," says Capper's Farmer (December).

"By crossing it with Leoti, a sweet sorghum, a hybrid which is resistant to a foliage disease known as red spot has been developed. This hybrid also produces a seed with an attractive sienna colored glume which will distinguish it from other seeds. Another new variety which possesses a sweet stalk is being developed through hybridization. This one likewise has a marked seed by reason of a chocolate colored glume which will distinguish it from other sorghums or other varieties of Sudan. Resistance to red spot is another characteristic of the sweet-stalked variety. Seed of the new strains will not be ready for distribution until several additional crosses have been made."

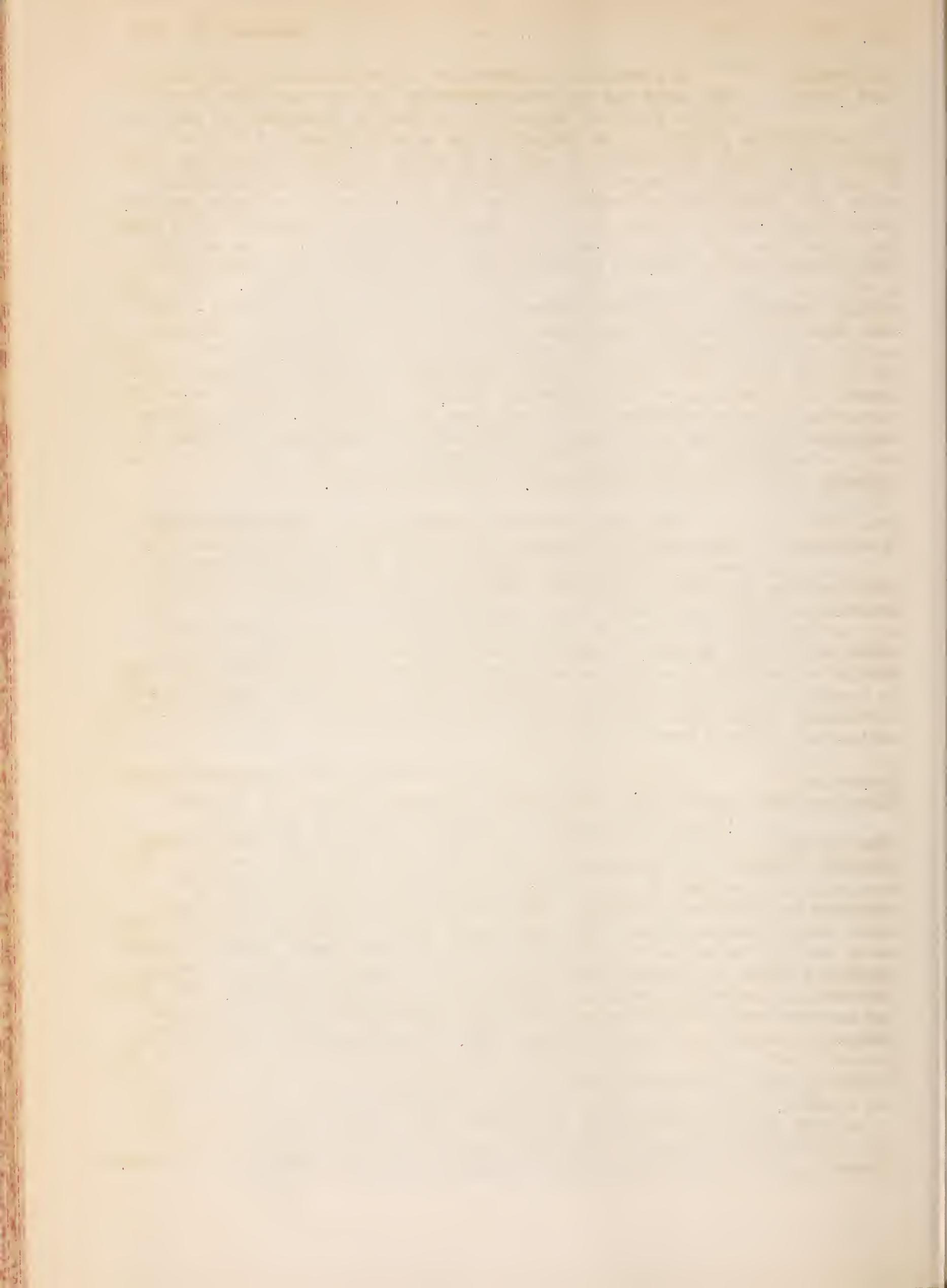
Chemotherapy Nature (London, December 5) reports that "Great Britain Institute is to have an institute of chemotherapy, and at the annual dinner of the Royal Society Neville Chamberlain stated that as Chancellor of the Exchequer he had just consented to give a grant of 30,000 pounds a year towards the establishment of such an institution..."

Retirement Laws Urged A five-point program for liberalization of the retirement laws was approved yesterday by the executive council of the National Federation of Federal Employees as part of its legislative program to be pushed in the next Congress. The council called for: first, retirement at age of 60 after 30 years of service, and at age of 62 after 15 years or more service at the option of employees only, with compulsory retirement at the age of 70 for all workers; second, placing annuitants retired for total disability on the permanent roll when they reach the age of 62 years, continuing the annuity from the date of medical examination showing recovery until the annuitant is restored to service in a position comparable to the one held at retirement; third, retiring employees involuntarily separated from service for reasons other than misconduct when such employees are 62 or more, basing the deferred annuity and the immediate life annuity at the age of 62 instead of the ages 62, 65 and 70 as now; fourth, giving employees the option of making additional contributions to the retirement fund, to purchase either increased annuities or to be returned to the employee as a lump sum; fifth, giving employees the option at the time of retirement of selecting a reduced annuity of equivalent value, actuarially determined, to cover the life of the employee and a selected beneficiary. (Washington Post.)

Cold for Greenhouses "Hitherto the term 'glasshouse' or 'greenhouse' has been almost synonymous with 'hothouse'; nevertheless, we are reminded by the schemes afoot for the application of refrigeration to these structures," says Ice and Refrigeration (London, December), "that the primary use of a greenhouse is to protect from wind and weather and that there is large scope for temperature control downwards as well as upwards. Indeed, a combination of glasshouse culture should be possible whereby the heat extracted from cooled glasshouses may be reused by the circulation of condenser water through the heating pipes of others. Thus, both heat and cold would be produced by the same machine, acting as an ideal form of heat pump."

Proved Dairy Sires and Dams "During recent years the breeding of registered dairy cattle has been greatly extended," says E. T. Wallace, Purdue University, in Breeder's Gazette (December).

"Through 4-H dairy calf club activities and other agencies, small farmer breeders have become interested in owning and breeding dairy cattle. This new group of breeders is not satisfied with a hit-and-miss method of breeding and uncertain results. Furthermore, they depend largely upon their dairy income; hence, herd improvement means increased income. Their herds are maintained as a profitable market for home grown feeds. Higher producing herds mean higher crop prices. As a result, we have a growing interest in production records, proved sires and proved females. The problem is more complicated because we do not have uniform and standardized management conditions on the average farm. Unquestionably, environmental factors exert a great influence upon the cows' production records. It is necessary that we proceed slowly in the development of a dairy cattle breeding program. Due to the great variety of conditions that exist on farms it is also quite probable that the program will not be infallible. Just as a manufacturer tests and examines his raw material before he starts production of the finished product, so must we analyze our dairy animals..."



DAILY DIGEST

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Vol. LXIII, No. 69

Section 1

December 21, 1936

FREIGHT RATE DECISION By a 9-to-2 decision, the Interstate Commerce Commission yesterday denied the plea of Class I railroads that emergency freight rates, which will expire December 31, be continued until sixty days after the commission's decision on the proposed general freight rate adjustment. The commission majority cited expanding national recovery and declared that the conditions which led to the original authorization of the emergency charges no longer existed. (Press.)

TOBACCO SALE RECORD What veteran warehousemen said they believed to be an all-time record for the sale of light burley tobacco was recorded at Lexington Saturday during a 4-H club sale, when a small basket of choice leaf brought \$1.25 a pound. Warehousemen said that in their recollection the highest previous figure for tobacco was the \$1.16 a pound brought by burley sold by Webb Offutt in Scott County in the peak year of 1919. (A.P.)

TEXTILE REPORT Woolen and textile companies averaged a higher rate of return on investment in the last six months of 1935 than for any half year subsequent to January 1933, excepting the last half of that year, according to a report by the Federal Trade Commission yesterday on its investigation of the textile industry. In its first report on the industry, made public last month, the commission gave similar information on the cotton textile industry. A later report will summarize operating data on silk and rayon companies. (Press.)

BRAZILIAN COTTON, COFFEE A Rio de Janeiro report to the New York Times says that as a potential export in Brazilian economy, cotton daily gains in ascendency, filling the gaps left by the decreased exportation of other products, especially coffee. While the ratio of coffee exports to the whole dropped for the first ten months this year to 44.77 percent, from 52.10 percent a year before, cotton attained 19.71 percent, against 16.5 percent in 1935. Brazilian cotton exports in the ten months increased over the same period of last year 4,544,637 pounds, against 6,225,475 pounds this year, despite a drop in the sales price of about 2 1/4 percent.

Turkey
Prices

"...A good many turkey growers seem to be blaming the Thanksgiving prices upon the fact that the government made public a report indicating the largest turkey crop on record and an increase of about one-third over last year," says an editorial in Turkey World (December). "...At the time the government report appeared, many buyers throughout the country were talking of a turkey crop twice as large as a year ago...Buyers keep in close touch with reports from all sections of the country and do a great deal of traveling in order to find out the situation. As in every other business, some of them are unscrupulous enough to exaggerate greatly the situation for their own gain. If growers, on the other hand, do not have any unbiased, reliable report of the situation, how can they combat these exaggerated stories? How can they know what the situation is? Was it better to forewarn them of the increase in the size of the crop, so they might have time to work up new market outlets, or should they have been allowed to have come up to the Thanksgiving season expecting a profitable market? The latter policy would have caused a greater shock than the one followed, in our estimation. We believe that as long as the government forecasters had what they considered a reasonably accurate forecast of the situation, it was the proper thing to release it for the information of everyone concerned. Such a report did not tell the buyers anything they did not already know. In many instances, it served to bring their stories from the heights of fancy down to solid earth, and it did give turkey growers definite information. One of the main criticisms directed against the report is that it is inaccurate and shows a much larger increase in the size of the crop than actually exists. A number of producer organizations and individuals have been extremely caustic in their comment on this phase of the report. We do not think that is the proper attitude to take...This turkey forecast...was obtained in exactly the same way that previous reports have been obtained and was believed to be as accurate as previous reports. These men are sincere and sympathetic with the producers, but on the other hand they cannot and should not suppress information simply because it seems to be unfavorable to one group...In addition to the promise of more complete reports next year, we also have been promised that the government report will be issued earlier in the fall in order that it may be carried in the October turkey magazines, rather than coming out so late that it can be reported only in the November issues. This would allow growers and marketing agencies considerably more time to make their marketing plans..."

Potato
Barrel

"A new potato barrel, designed to eliminate much of the bruising that occurs when potatoes are picked from the ground and dumped into the barrel, made its appearance in Aroostook County, Maine, fields this past fall," says Bruce B. Miner, University of Maine, in Country Gentleman (December). "The new barrel is about 20 inches in diameter inside and 28 inches deep and has a capacity of about 12 1/2 pecks as commonly filled. This is about a half peck more than the standard barrel. A specially designed picking basket is used with the new barrel. This basket is about 17 inches across and 13 inches from the top of the handle, or bail, to the bottom of the basket. Straps riveted to each side of the basket make it easy to turn over in the barrel. The weaving is carried over the edge of the basket to eliminate the sharp edges found in machine-made baskets."

Highway
Planning

"Two factors in state road planning stressed by Highway Engineer Gibb Gilchrist, president of the American Association of State Highway Officials, impress the thoughtful man who pays for his state's thoroughfares," says an editorial in the Dallas Morning News (December 10). "Gilchrist urges continuation and extension of long-time appropriation and planning for every state highway system, with a minimum of four years' advance work under contract. He recommends handling the new federal aid program for secondary and feeder roads through the state highway departments under the direction of the Federal Bureau of Public Roads, as the cardinal network is now administered. Every state has profited by the part the bureau has played in road construction in the past decade. The presence of a third party disinterested politically and committed to the safe expenditure of federal aid funds, has operated everywhere to prevent scandalous contracts and the criminal waste of highway funds, all too prevalent when state politics alone controls. The Federal Government is interested in building roads for the people who use them in the interest of the man who pays for them...Federal aid has centralized the highway program control and the Nation is all the better off for that."

N.J. Science
Studies

Scientific studies affecting New Jersey's dairy and oyster industries are planned by the Bureau of Biological Research of Rutgers University. It is reported that considerable losses incurred by the oyster industry as a result of the high death rate among young oysters may be checked as a result of research being carried on by Drs. Thurlow C. Nelson and James B. Allison. Other projects include studies of the spoilage and off-flavors of milk, the possibility of encroachment by the Spotswood pine-barren 'island' on surrounding fertile areas, and the possibility of increasing the effectiveness of the pneumonia immunization serum. The bureau was established by the trustees of the university last May to coordinate the research of the eleven members of the departments in bacteriology, botany, physiology and zoology. (Science, December 18.)

Keep Xmas
Trees Green

This year you can go to the drug store and buy three inexpensive chemicals and make a solution which will preserve your Christmas tree fragrant and green for the full week of holiday festivities, says Science News Letter (December 19). You can thank Dr. R. H. Carr, professor of agricultural chemistry at Purdue University, for the following directions. Go to your druggist and buy 15 grams of calcium carbonate, 5 grams of citric acid and 6 grams of malic acid. Mix the last two, which are both liquids, in three quarts of water. Save the calcium carbonate until you are ready to set up your tree. Set the base of your Christmas tree in a wide-mouthed gallon bottle or a pickle crock and brace it with small, unnoticed wires. Then mix the calcium carbonate in the citric-malic acid solution and pour it all into the crock. As the tree drinks up the solution, add more water. Hemlock is about the only tree which appears not to be aided by this treatment.

Machinery

Industrial machinery exports during October were described by the Commerce Department recently as having reached the highest monthly volume since June 1931. At \$16,003,332 in October these exports were 36 percent above the same month last year. (Press.)

Section 4

MARKET QUOTATIONS

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December 18 -- Livestock at Chicago (Closing Quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.75-12.25; cows good 5.25-6.25; heifers 550-750 lbs good and choice 8.75-12.00; vealers good and choice 9.50-11.00; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.50-10.05; 200-250 lbs good and choice 9.85-10.15; 250-350 lbs good and choice 9.90-10.15; slaughter pigs 100-140 lbs good and choice 8.25-9.35. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.50-9.15.

Grain: No. 1 D.No.Spr.Wheat* Minneap. 155-157; No. 2 D.No.Spr.* Minneap. 154-156; No. 2 Am.Dur.* Minneap. 148-154; No. 1 Hard Amber Durum, Duluth, 154-166; No. 2 Hard Winter* K.C. 136-144; Chi. 138 $\frac{1}{4}$ -142 $\frac{1}{2}$; St. Louis 142; No. 2 S.R.Wr. St. Louis 141; No. 1 W.Wh. Portland 115; No. 2 rye, Minneap. 113-119 $\frac{1}{2}$; No. 2 yellow corn, K.C. 115 $\frac{1}{4}$ -117; No. 3, Chi. 106 $\frac{1}{2}$ -109 $\frac{1}{4}$; St. Louis 107 $\frac{1}{2}$ -109 $\frac{1}{2}$; No. 2 mixed, St. Louis 107 $\frac{1}{2}$ -110; No. 3 white oats, Minneap. 50 3/8-52 3/8; K.C. 54 $\frac{1}{4}$ -57; Chi. 52-53 $\frac{1}{2}$; St. Louis 54; No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 121-129; No. 2, Minneap. 91-93; No. 1 flaxseed, Minneap. 218-230 $\frac{1}{2}$.

Maine sacked Green Mountain potatoes \$2.35-\$2.60 per 100 pounds in eastern markets; \$1.87 $\frac{1}{2}$ -\$1.97 $\frac{1}{2}$ f.o.b. Presque Isle. Idaho sacked Russet Burbanks \$2.52 $\frac{1}{2}$ -\$2.75 carlot sales in Chicago; \$1.75-\$1.90 f.o.b. Idaho Falls. Florida Bliss Triumphs \$1.50-\$2.12 $\frac{1}{2}$ per bushel crate in eastern cities; \$1.70 f.o.b. Belle Glade. East Shore Maryland and Delaware Jersey type sweet potatoes 75¢-\$1.15 per bushel basket in city markets. Tennessee Nancy Halls \$1.25-\$1.40 in the Middle West. New York Yellow onions 55¢-75¢ per 50-pound sack in the East. Midwestern stock 50¢-75¢ in consuming centers. New York Danish type cabbage 50¢-80¢ per 50-pound sack in terminal markets; sacked per ton \$18-\$20 f.o.b. Rochester. South Carolina Pointed type \$1-\$1.18 per 1 $\frac{1}{2}$ bushel hamper in a few cities. Texas Round type \$2-\$2.25 per lettuce crate in consuming centers; \$1.15-\$1.25 f.o.b. Lower Rio Grande Valley Points. New York Rhode Island Greening apples, U. S. #1, 2 $\frac{1}{2}$ inch minimum, \$1.25-\$1.35 per bushel basket in New York; \$1.10-\$1.15 f.o.b. Rochester. New York McIntosh \$1.50-\$1.85 in New York.

The average price for Middling 7/8 inch spot cotton in the ten designated markets advanced 4 points from the previous close to 12.58 cents per pound. On the same day last year the price was 12.56 cents. March future contracts on the New York Cotton Exchange advanced 5 points to 12.20 cents and on the New Orleans Cotton Exchange advanced 4 points to 12.14 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, 34 $\frac{3}{4}$ cents; 91 Score, 34 $\frac{1}{2}$ cents; 90 Score, 34 cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, 19 $\frac{1}{2}$ cents; S.Daisies, 18-18 $\frac{1}{4}$ cents; Y.Americas, 18 $\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, 32 $\frac{1}{2}$ cents; Standards, 31 $\frac{1}{2}$ cents; Firsts, 30 $\frac{1}{2}$ cents. (Prepared by BAE).

*prices basis ordinary protein.

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DAILY DIGEST

Prepared in the Press Service, Office of Information, United States Department of Agriculture, for the purpose of presenting all shades of opinion as reflected in the press on matters affecting agriculture, particularly in its economic aspects. Approval or disapproval of views and opinions quoted is expressly disclaimed. The intent is to reflect the news of importance.

Vol. LXIII, No. 70

Section 1

December 22, 1936

BRITAIN AIDS EMPLOYMENT Pioneering in an extraordinary plan to use accumulated wealth to eliminate want from the world, Baron Nuffield, British automobile manufacturer, yesterday donated \$10,000,-000 to stimulate employment in Great Britain's poverty-stricken "depression areas", says a London dispatch to the Washington Post. The gift, first of its kind so far as was known, created a stir in the British capital. Government leaders, who long have wrestled with the problem of alleviating suffering in depression-stricken areas, jubilantly considered the possibility that other fortune holders might fall into line.

CUBAN SUGAR BILL A Havana report by the Associated Press says the House of Representatives yesterday impeached President Miguel Gomez by a vote of 111 to 45. The ouster vote was taken after the house and senate snowed under Gomez' veto of the army-sponsored sugar tax bill which would have provided funds for the maintenance of army-taught rural schools.

SUGAR FUTURES New high levels for the season were established in all of the later positions in the sugar futures market yesterday on a continuation of Wall Street and commission house buying, which seemed to be encouraged by the firmness of the outside market. March sold at 2.87 and September from 2.94 to 2.95, or 1 to 3 points net higher.

GERMAN BREAD BAN A Berlin wireless to the New York Times says Berlin bakers have been informed that from January 1 the sale of fresh bread will be prohibited. It is reported that all bread sold must be more than a day old. The government-controlled bakers' cooperative association, which is spreading this news, explains that more slices can be cut from stale than from a fresh loaf. Furthermore, customers are not expected to eat as much stale bread as they might if it were fresh. Spread over millions of bread eaters, such small differences are expected to make a considerable reduction in national bread consumption.

CONSUMER COOPERATIVES Sales of consumer cooperatives in the United States aggregated about \$400,000,000 in 1935, but represented only a little more than 6 percent of the national total of wholesale and retail purchases, according to figures compiled by the New York Trust Company and published in the current issue of The Index, the bank's publication. (New York Times.)

December 22, 1936

Save Holly
Trees

"...National organizations of garden clubs, women's clubs and other conservation groups are much concerned over the rapid destruction of holly," says Wilbur O'Byrne, Extension Forester, Virginia Polytechnic Institute, in Southern Planter (December). "They point out that the tree has largely disappeared throughout the northern part of its range and that each year buyers are forced to go farther and farther for their supplies. A few years ago most of the commercial holly came from New Jersey. As it disappeared there, Delaware became the center of the industry. Then came the tidewater sections of Maryland, and now it is Virginia and North Carolina...If we are to continue with the use and sale of Christmas holly, therefore changes are necessary in our harvesting practices. First, holly trees must be protected against mutilation and destruction by thieves, vandals and thoughtless people hunting Christmas greens...Second, the owner must see that the harvesting is properly done...Finally, new trees must be started to take the place of those which have been destroyed..."

Cotton
Moths

"Grape growers in northern states who have been puzzled by the appearance of tan colored moths or 'millers' in their vineyards during the past fall will be interested to know that this is not some new and important pest, but is the cotton moth of the South," says American Fruit Grower (December). "According to J. S. Houser, chief of the department of Entomology of the Ohio Experiment Station, these moths are the parent or adult form of the cotton leaf worm of the Southern States...The moths cause no damage in the North except that they sometimes attack ripening fruit. The tongue of the insect is equipped with a file-like scraper by means of which the skin of grapes, peaches and apples is punctured, after which the juice is extracted. Harvesting as soon as the fruit ripens is the only known method of protecting the fruit."

Community
Dairy Plant

"Bemiston, Alabama, will soon have something new in the way of a dairy plant," says Fred H. Sorrow in Southern Dairy Products Journal (December), "that is, a dairy operated on an entirely non-profit basis for the benefit of the community. The dairy will consist of three frame buildings with metal roofs--a feed barn, a milking barn and a milk house. The feed barn will be constructed first. The herd will be started with half a dozen good cows and increased to 24 head later. The milk will be sold through the village cooperative store."

Improvement
of Butter

"...The Federal Food and Drug Administration has conducted a campaign against the production of poor quality butter," says the manager of a midwest creamery in the Hoosier Farmer (December). "Large amounts of butter have been seized by this government agency and it is their plan to eliminate from the American market all inferior grades of butter. Because of this, it has been necessary and essential for the various plant managers to be very careful regarding the quality of cream they accept for butter making purposes. Sediment tests are being run and grade buying has been put into practice. These both have been very effective methods in improving the quality as a whole and if we are to continue to hold our present markets it is neces-

sary to continue quality work...To assist creameries in the production of better quality butter, the Midwest Producers Creameries installed a complete control laboratory where tests are made on the butter manufactured in the member plants. These tests include microscopic examinations as well as bacteriological examinations and a complete chemical analysis of the product. These tests also assist the member creameries to check on the composition of the butter, thereby enabling them to control the fat content so as not to manufacture butter containing an excessive amount of fat above that required by the law and also to protect the creamery from manufacturing illegal butter or butter with a fat content less than that required by law. This laboratory control work will tend, over a period of time, to increase the uniformity of the butter manufactured by the various plants..."

Civil Service Examinations The Civil Service Commission announces the following examinations: principal commodity exchange investigator, \$5,600; senior commodity exchange investigator, \$4,600; commodity exchange investigator, \$3,800; associate commodity exchange investigator, \$3,200; assistant commodity exchange investigator, \$2,600, unassembled (optional subjects--1. cotton, 2. grain, 3. butter and eggs) Commodity Exchange Administration; senior informational service representative, \$4,600; informational service representative, \$3,800; associated informational service representative, \$3,200; assistant informational service representative, \$2,600, assembled, Social Security Board; animal husbandman (sheep and goat breeding) \$3,800; associate animal husbandman (sheep and goat breeding) \$3,200; associate animal husbandman (swine) \$3,200; associate in animal nutrition \$3,200, unassembled, Bureau of Animal Industry; engineer pilot, \$3,800, unassembled, Forest Service; scientific aid (milling and baking technology) \$1,800, assembled, Bureau of Plant Industry. Applications to be on file not later than: (a) January 14, if received from Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming; (b) January 11, if received from states other than in (a).

Mississippi Seed Law "Mississippi's seed law, sought by agricultural leadership for many years, is now in full operation to protect farmers in seed purchases amounting to hundreds of dollars annually, according to J. C. Holton, commissioner of agriculture," says Southern Agriculturist (December). "The underlying purpose of the law is to end harmful practices of the past, whereby seeds not true to name and variety or containing excessive amounts of weed seeds, some of them pests of the worst kind, or not having sufficient germinating qualities, were sold to farmers often at excessive prices."

Incompatible Plants Incompatibility, frequent source of marital wrecks among human beings, has a biological ^{protoplasmic} _{analogue} ^{incorpatibility} among plants, Evidence to this effect has been worked out at the New York Botanical Gardens by WPA researchers, under Dr. A. B. Stout. Some of the plants investigated in the research could not produce seed when crossed with each other, but when used in hybridization experiments with different plants reproduced quite normally. A graphic display illustrating these conclusions has been prepared for display by the Women's and Professional Division of the Works Progress Administration. (Science Service.)

December 22, 1936

Section 3
MARKET QUOTATIONS

December 21 - Livestock at Chicago (Closing Quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.75-12.25; cows good 5.25-6.25; heifers 550-750 lbs good and choice 8.75-12.00; vealers good and choice 9.50-11.00; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.75-10.15; 200-250 lbs good and choice 10.00-10.25; 250-350 lbs good and choice 10.00-10.25; slaughter pigs 100-140 lbs good and choice 8.35-9.50. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.50-9.25.

Grain: No. 1 D.No.Spr.Wheat* Minneap. $15\frac{1}{4}$ - $15\frac{1}{2}$; No. 2 D.No.Spr.* Minneap. $15\frac{1}{2}$ - $15\frac{1}{4}$; No. 2 Am.Dur.* Minneap. $14\frac{1}{2}$ - $15\frac{1}{2}$; No. 1 Hard Amber Durum, Duluth, $15\frac{1}{2}$ - $16\frac{1}{2}$; No. 2 Hard Winter* K.C. $13\frac{1}{2}$ - $14\frac{1}{2}$; Chi. $13\frac{1}{4}$ - $140\frac{1}{4}$; No. 2 S.R.Wr. St. Louis $14\frac{1}{2}$; No. 1 W.Wh. Portland $11\frac{1}{4}$; No. 2 rye, Minneap. $11\frac{1}{2}$ 3/8- $11\frac{1}{2}$ 3/8; No. 2 yellow corn, K.C. $11\frac{1}{2}$ - $11\frac{1}{4}$; St. Louis $11\frac{1}{2}$ - $11\frac{1}{2}$; No. 3, Chi. $10\frac{1}{2}$ - $11\frac{1}{2}$; No. 3 white oats, Minneap. $50\frac{1}{2}$ - $51\frac{3}{4}$; K. C. $53\frac{1}{2}$ - $55\frac{1}{2}$; Chi. $52\frac{1}{2}$ - $53\frac{1}{2}$; St. Louis $53\frac{1}{2}$; No. 1 malting barley, Minneap. $132\frac{1}{2}$ - $134\frac{1}{2}$; No. 3 good malting, Minneap. $122\frac{1}{2}$ - $130\frac{1}{2}$; No. 2, Minneap. $85\frac{1}{2}$ - $92\frac{1}{2}$; No. 1 flax-seed, Minneap. $217\frac{1}{2}$ - $230\frac{1}{2}$.

Maine sacked Green Mountain potatoes \$2.35-\$2.60 per 100 pounds in eastern cities. Wisconsin sacked Round Whites \$1.90 carlot sales in Chicago; \$1.60-\$1.62 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.55-\$2.85 carlot sales in Chicago; \$1.80-\$1.90 f.o.b. Idaho Falls. Florida Bliss Triumphs \$1.75-\$2.25 per bushel crate in city markets. New York Yellow onions 50¢-75¢ per 50-pound sack in the East; Midwestern stock 50¢-75¢ in city markets; 45¢- $47\frac{1}{2}$ ¢ f.o.b. West Michigan Points. New York Danish type cabbage 50¢-80¢ per 50-pound sack in terminal markets; sacked per ton \$18-\$19 f.o.b. Rochester. South Carolina Pointed type \$0.90-\$1.25 per $1\frac{1}{2}$ -bushel hamper in the East. Texas Round type \$2-\$2.50 per lettuce crate in city markets; \$1-\$1.15 f.o.b. Lower Rio Grande Valley points. New York, U.S.#1, $2\frac{1}{2}$ inch, minimum, Rhode Island Greening apples, \$1.25-\$1.50 per bushel basket in New York; McIntosh \$1.75-\$1.85; Baldwins \$1.35-\$1.50.

Average price Middling 7/8 inch spot cotton in ten designated markets declined 4 points from the previous close to 12.55 cents. On the same day last year the price was 11.65 cents. March future contracts on the New York Cotton Exchange declined 3 points to 12.18 cents and on the New Orleans Cotton Exchange declined 3 points to 12.13 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, $34\frac{3}{4}$ cents; 91 Score, $34\frac{1}{2}$ cents; 90 Score, $33\frac{3}{4}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, $19\frac{1}{2}$ cents; S.Daisies, $18\frac{1}{2}$ cents; Y.Americas, $18\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, 34 cents; Standards, $33\frac{1}{2}$ cents; Firsts, $31\frac{1}{2}$ -32 cents. (Prepared by BAE)

*Prices basis ordinary protein.

DAILY DIGEST

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Vol. LXIII, No. 71

Section 1

December 23, 1936

CHEMICAL
SOCIETY
REPORT

The American Chemical Society has listed a synthesis of a female hormone among leading contributions of the nation's chemical industry in 1936, says a New York report by the United Press. The society in its annual report asserted the United States industry led all others, both in number of inventions and the quantity of material produced. The review said "huge tonnages of synthetic products used in this country are daily increasing and their variety is widening at a rate far greater than can be equaled in any other country of the world." Theelin, one of the two sex hormones responsible for female characteristics, was listed as an important development because of its future use in the control of sex irregularities. It was made synthetically from ergosterol by Russell E. Marker and Thomas S. Oakwood at the Pennsylvania State College and is the third sex hormone to be made artificially.

BURLEY AT
17-YEAR HIGH

A new top price of 67 cents a pound, the highest in 17 years, was paid on the burley tobacco market at Weston, Missouri, day before yesterday, says an Associated Press report. The day's sales totaled 91,126 pounds at a floor average of \$34.66 a 100.

DISTRIBUTION
PROBLEMS

Distribution, not production, is the biggest problem facing American business, Harper Sibley, president of the Chamber of Commerce of the United States, stressed to members of the Puerto Rico Chamber of Commerce yesterday, according to a San Juan report. The distribution, he said, must be not only of products but also of profits. He said he saw no immediate trade gain from the Buenos Aires peace conference but was confident all South America would be a big market for United States mass products for many years.

GERMAN
BREAD BAN

Nazi Germany decided on a fish sale with directions for cooking yesterday and appealed to housewives to save bread crusts to cope with the food shortage and lessen the need for foreign imports, says a Berlin report by the Associated Press.

NO DAILY DIGEST ON THURSDAY, DECEMBER 24 (HALF HOLIDAY)

December 23, 1936

Agrarian
Economy

Louis Bernard Schmidt, Iowa State College, is author of "Whither Agrarian Economy" in Social Forces (December).

He says in part: "The individual farmer can no longer succeed by his own unaided efforts. In earlier days the things which made for success or failure were largely in the control of the individual farmer. Today, other factors beyond the influence of the individual lean upon the success of a farm enterprise in ways undreamed of fifty years ago. Formerly the man who handled his resources efficiently was a successful farmer. If he was industrious he was assured of success. Today even the most thrifty, efficient, and industrious may fail through no fault of their own. Forces have been set in motion with which society alone can cope. The individual is helpless in attempting to deal with the larger forces... The problems of an agricultural society can no longer be left to choice. For solving these problems, the prevailing 'economic fatalism' must give way. The notion that 'nothing can be done', that the course of economic events is inevitable, must give way to the idea that the actions of society can and do profoundly affect the course of events; that intelligent action modifies the direction in which economic forces work themselves out; and that society can modify to a considerable extent the effects of economic forces by making it possible for individuals to adjust themselves to these forces easily and quickly."

British
Livestock

Country Life (London, December 12) says editorially:

"Mr. Morrison has now made his bow as Minister of Agriculture and has done something to define more clearly the government's policy with regard to livestock by accepting a private resolution calling for immediate and effective measures to make that branch of agriculture prosperous, so that the pressure on the other branches should be relieved... It is now generally recognised that the livestock industry could not possibly disappear without disastrous consequences to any policy of increasing the supply of home-produced foodstuffs... The situation of the industry as a whole was, until recently, desperate, and until the government's long-term policy, as revealed in the forthcoming livestock industry bill, has been tested it cannot be expected that it will be secure..."

Merit
System

Robert L. Johnson, president, National Civil Service Reform League, is author of "The Business Man's Stake in the Civil Service" in National Municipal Review (December).

He says in part: "There seems to be a very strong likelihood of prompt action by the Congress if the present public demand for the merit system continues and grows. But do not let us delude ourselves that the responsibility rests entirely on the President or that the President has it in his power to put more than about 15 percent of the new agencies under civil service requirements by executive order. The Congress must take the larger responsibility... Some question the advantages of a constitutional amendment over congressional legislation to the same effect. Three reasons favor the constitutional amendment. First, there is no assurance that congressional legislation will not be repealed or changed by the succeeding legislatures. Even if the legislation stands there are various ways in which it may be evaded. Second, it would preclude Congress from adopting

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spoils riders to important legislation in the hope or realization that the President could not afford to veto such important bills merely because of the exceptions provided in the riders from civil service laws. Third, the sentiment of the country is more likely to recognize and support a constitutional provision than congressional action alone."

New Hybrid Pop Corn "Just when pop corn production is at a low ebb and drought conditions have nearly wiped out pop corn crops in the main producing sections of the Northwest, the Minnesota Experiment Station holds out good promise to growers of pop corn in its new Jap hybrid hulless variety, called Minhybrid No. 250," says Seed World (December 18). "The new variety differs from the standard Japanese hulless in several details, according to H. K. Hayes, chief of the division of agronomy and plant genetics, under whose direction the new Minhybrid was produced. Records kept by the experiment station show that the new hybrid produced a 16 percent greater average yield than the standard Japanese hulless variety. In addition, the new variety showed an average popping expansion of 29 percent greater--a vital point in increasing the commercial value of the corn. The new hybrid is a single cross, being produced by crossing the inbred lines of Japanese hulless one and six, and using the first cross for the commercial crop. The seed thus produced from the two inbred strains is sold only for commercial crop of pop corn. The seed saved from this planting is worthless for producing more of the same hybrid corn, as it reverts to the original inbred strains..."

Phosphorus Deficiency "As pointed out by Theiler and Green in South Africa and Australia, phosphorus deficiency is a widespread affection of domestic animals," says Veterinary Medicine. "It strikes cattle and sheep more than horses, although important in preventing growth in colts. Heifers are particularly predisposed to the effect on gestation and lactation and calves begin to show the effect as soon as they are weaned. Milk appears to furnish sufficient phosphorus for their early needs. It was in the study of enzootic botulism of cattle that the deficiency of phosphorus was brought to light. Pasturing on phosphorus-deficient land pressed cattle to search for and eat bones and putrefied carcass debris which infected them with botulism. The hunger for phosphorus was the indirect cause of the botulinus infection. It will be recalled that these authors pointed out that the phosphorus deficiency occurred in variable degrees. Slight cases hunted for clean white bones while severe ones ate anything, from stinking detritus to poisonous plants. The osteophagia botulism syndrome of South African cattle is worthy of considerable study among animals affected with a pica of mineral deficiency origin that causes them to eat animal or vegetable material they would otherwise avoid. Perhaps some of our poisonous plant troubles have not only a shortage of suitable forage, but an existing deficiency, as the primary cause. Perhaps in not a few cases a nutritional deficiency is the sole cause for eating poisonous plants."

December 23, 1936

Section 3
MARKET QUOTATIONS

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Dec. 22 --- Livestock at Chicago (Closing quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 9.75-12.25; cows good 5.25-6.25; heifers 550-750 lbs good and choice 8.75-12.00; vealers good and choice 9.00-10.50; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.75-10.20; 200-250 lbs good and choice 10.05-10.30; 250-350 lbs good and choice 10.05-10.30; slaughter pigs 100-140 lbs good and choice 8.35-9.50. Slaughter sheep and lambs, lambs good and choice 90 lbs down 8.50-9.15.

Grain: No. 1 D.No.Spr.Wheat* Minneap. 151 7/8-153 7/8; No. 2 D.No.Spr.Wheat* Minneap. 150 7/8-152 7/8; No. 2 Am.Dur.* Minneap. 143 3/8-149 3/8; No. 1 Hd.Am.Dur.Duluth 149 3/8-161 3/8; No. 2 Hd.Wr.* K.C. 133 $\frac{3}{4}$ -140; Chi. 136 $\frac{3}{4}$ -139 $\frac{1}{4}$; No. 2 S.R.Wr. St. Louis 139; No. 1 W.Wh.Portland 111 $\frac{1}{2}$. No. 2 rye Minneap. 107 $\frac{1}{2}$ -114 $\frac{1}{2}$. No. 2 yellow corn, K.C. 115 $\frac{3}{4}$ -117. No. 3 yellow, Chi. 105 $\frac{1}{4}$ -108 $\frac{1}{2}$; St. Louis 108-108 $\frac{1}{2}$. No. 3 white oats, Minneap. 48 3/8-49 7/8; K.C. 52 $\frac{1}{2}$ -54 $\frac{3}{4}$; Chi. 50 $\frac{3}{4}$ -51 $\frac{3}{4}$; St. Louis 52 $\frac{1}{2}$. No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 122-130; No. 2 Minneap. 83-90; No. 1 flaxseed Minneap. 215-228.

Maine sacked Green Mountain potatoes \$2.35-\$2.60 per 100 pounds in eastern cities; \$1.92 $\frac{1}{2}$ -\$1.97 $\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites \$1.85-\$1.90 carlot sales in Chicago; \$1.61 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.57 $\frac{1}{2}$ -\$2.77 $\frac{1}{2}$ carlot sales in Chicago; \$1.80-\$1.90 f.o.b. Idaho Falls. Florida Bliss Triumphs \$1.75-\$2 per bushel crate in eastern cities. New York Yellow onions 50¢-75¢ per 50-pound sack in the East. Midwestern stock 50¢-75¢ per 50-pound sack in city markets; 45¢-47 $\frac{1}{2}$ ¢ f.o.b. West Michigan points. New York Danish type cabbage 50¢-80¢ per 50-pound sack in terminal markets; sacked per ton \$18-\$20 f.o.b. Rochester. South Carolina Pointed type \$0.90-\$1.18 per 1 $\frac{1}{2}$ -bushel hamper in the East. Texas Round type \$1.85-\$2.50 per lettuce crate in consuming centers; \$1 f.o.b. Lower Rio Grande Valley points. East Shore Maryland and Delaware Jersey type sweet potatoes 75¢-\$1.25 per bushel basket in city markets. Tennessee Nancy Halls \$1.25-\$1.40 in the Middle West. New York, U.S.#1, 2 $\frac{1}{2}$ inch minimum, Rhode Island Greening apples, \$1.25-\$1.35; McIntosh \$1.50-\$1.75 and Baldwins \$1.35-\$1.50 per bushel basket in New York City.

Wholesale prices of fresh creamery butter at New York were: 92 Score, 34 $\frac{3}{4}$ cents; 91 Score, 34 $\frac{1}{2}$ cents; 90 Score, 33 $\frac{3}{4}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flat, 19 $\frac{1}{2}$ cents; S.Daisies, 18-18 $\frac{1}{4}$ cents; Y.Americas, 18 $\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Bary Company quotations) were: Specials, 34 cents; Standards, 33 $\frac{1}{2}$ cents; Firsts, 31 $\frac{1}{2}$ -32 cents.

Average price of Middling 7/8 inch spot cotton in ten designated markets declined 7 points from the previous close to 12.49 cents. On the same day last year the price was 11.67 cents. March futures contracts on the New York Cotton Exchange declined 7 points to 12.11 cents; on the New Orleans Cotton Exchange declined 7 points to 12.06 cents. (Prepared by BAE)

*Prices basis ordinary protein.

Chicago - Nom.

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DAILY DIGEST

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Vol. LXIII, No. 72

Section 1

December 28, 1936

PERENNIAL
WHEAT

A perennial wheat, a plant with the seed of ordinary wheat and the long-lived roots of grass, has been developed by plant breeders of Canadian experimental farms, it was announced at Ottawa Saturday. Dr. L. E. Kirk, Dominion agrostologist, said the new wheat is unlikely to replace annual wheats for bread making but may prove a valuable forage plant to restore to productive use large areas of drought ravaged land in western Canada. Plant breeders developed the plant by cross breeding ordinary strains of wheat with agropyron, a perennial grass closely akin to the common couch grass of eastern Canada and the crested wheat grass of western Canada. (A.P.)

U.S.-GERMAN
TRADE RULES

The Treasury outlined its rules governing trade policies with Germany yesterday, granting importers and exporters the right to barter merchandise and to use controlled mark credits, usually known as "blocked marks". During last summer the Treasury ordered countervailing duties on goods from subsidized German industries which came into this country, on the grounds of unfair competition and in accordance with anti-dumping laws. Both Germans and Americans began seeking a definition of subsidized industry and when the ruling was rescinded sought a liberalization of trade policies to permit individuals having "blocked marks" to use them in buying German goods. (Press.)

PAN-AMERICAN
HIGHWAY

A Buenos Aires cable to the New York Times says President Agusto P. Justo inaugurated Saturday the Buenos Aires end of the Pan-American Highway. He rode the 222 miles between Buenos Aires and Rosario over the new paved road connecting Argentina's two largest cities. The section opened cost 7,500,000 pesos, or \$34,000 a mile. It is 20 feet wide and is paved with reinforced concrete, except for 30 miles of macadam out of this city. It is now possible to travel the 475 miles from Buenos Aires to Cordoba in a day.

COMMERCE
REPORT

With all major industries contributing to the recovery movement, the indicated national income of at least \$60,000,- 000,000 for the 1936 calendar year will probably equal income paid out for the first time since 1929, which would suggest that business as a whole was at last "out of the red," Secretary Roper declared Saturday in his annual report to Congress.

December 28, 1936

Cotton
Damage

W. A. Parker, author of "Country Damage to Cotton" in Carolina Cooperator (December) says: "Few farmers realize that the damage to cotton left out in the open or under a leaky roof amounts to an estimated average of \$5 per bale...A prominent warehouseman told of a farmer who last year had difficulty in selling his cotton due to country damage. He grew twenty-five bales, eight of which he stored in a good dry building, but the other seventeen he left on the ground out in the open, subject to the ravages of the elements, rain, snow, and sunshine. A few months later, when he tried to sell this cotton, it was found to be so rotten that buyers would not bid on it until it was reconditioned. Originally the twenty-five bales weighed 12,200 pounds but 2,000 pounds were lost in reconditioning. He sold the entire lot, including the eight bales of good cotton, as one lump and at a flat price, as it had not been graded and stapled and he had no way of knowing what he had or if he was getting full value. The buyer deducted one-half cent per pound from the entire lot as he was afraid he might run into some damaged cotton that may have been overlooked. This amounted to \$51.00; the labor cost was \$41.40; 2,000 pounds of rotten cotton at 12 cents amounted to \$240.00, or the equivalent of six 460-pound bales of cotton at twelve cents a pound. To put it another way, where he could have gotten twelve cents for his crop at the time of ginning, the loss he sustained by not taking proper care of his cotton brought it down to the equivalent of about nine and one-fourth cents or a loss of almost three cents per pound. Another thing that must be taken into consideration is that it took about a month to recondition this cotton since it was wet and could not be rebaled until thoroughly dry..."

Homogenized
Milk

"The experience of those who first homogenized pasteurized milk in Canada and then later in the United States indicates that milk consumers generally preferred it to regular milk," says S. V. Layson, Illinois Department of Public Health, in Milk Plant Monthly (December). "...All health authorities have not welcomed or encouraged the introduction of homogenized milk into their territories. Some have even prohibited the product. They have given as the reason for prohibiting its sale that it meant the addition of another piece of equipment which was very difficult to maintain in a desirable sanitary condition. This is undeniably true but not sufficient reason to bar a promising dairy product. Adequate sanitary precautions on the part of plant operators and competent supervision on the part of those charged with the sanitation of milk supplies will prevent and overcome this difficulty. It has been stated that it was more difficult to check the butterfat content of the homogenized milk. The ether extraction method of testing overcomes this objection..."

Tobacco
Markets

The second week of the burley tobacco market season was the largest in history, says a Lexington report by the United Press. The week's sales were 8,298,872 pounds for \$3,965,641.35, an average of \$47.78. The average last year was \$21.48. The season's sales were 14,382,532 pounds, or \$5,928,493.74. The average was \$41.22.

December 28, 1936

Soil Conservation Act Improved administration of the soil conservation act was called for yesterday by Chairman Marvin Jones, of the House Agricultural Committee, who proposed simplified procedure and speeding up of payments. Jones said changes, improving and simplifying the farm program, can be brought about without new legislation. "In the first place," he said, "it should be announced earlier and proof of compliance should be simplified and hastened in order that payments may be made promptly...Second, instead of having three classifications, including soil depletion, soil conserving and soil building crops and practices, the entire field should be covered simply into two classifications--soil depleting crops and practices and soil building crops and practices." As a third means of improvement, Jones recommended that instead of benefit payments being measured by the basic production of individual crops, each farm should be treated as one unit and the allowance for soil building crops and practices measured by the basic tilled acreage. (Washington Post.)

Mealybug Parasite Western Canner and Packer (December) says that "Dr. Walter Carter, entomologist with the Pineapple Producers Cooperative Association experiment station at the University of Hawaii, has finally succeeded in breeding the first parasites of the mealybug which attacks the pineapple plant..." David T. Fullaway went out under the auspices of the AAA project to Brazil and sent back one of the parasites, *Anagyrus coccidovorus* Dozier, Dr. Carter explained. 'The others that look like wasps came from Colombia, Venezuela and were sent by the pineapple cooperative staff explorer, E. G. Salas. We call them *Pseudococcina hambletonia* Compere.'...Parasites have been placed in the fields in the past four months...Dr. Carter explained that no biological control project can be carried through without international cooperation. Hence, some of the bred parasites are being sent from the experiment station in Honolulu to the Philippine Islands and Puerto Rico."

X-Ray in Animal Practice Veterinarian North American (January) says editorially: "Attention is invited to this number particularly because it contains a report on 'Roentgen Epilation and Erythema Doses of the Skin of the Dog' by Pommer and Mahling. This report forms the basis for the therapeutic use of the X-ray in canine practice, with confidence. While comparatively few veterinary practitioners are interested in the subject just now many will be in the course of a few years. There is a field for the application of X-ray therapy in canine practice. That has been demonstrated. Before long it will doubtless be possible to purchase equipment for this work at a cost that will enable veterinarians to employ X-ray therapy in a practical manner in selected cases in large animals. But this cannot be inaugurated in a satisfactory manner until veterinarians familiarize themselves with the principles that govern this form of therapy. Practitioners of veterinary medicine must prepare themselves to cope with veterinary practice of the future..."

Panama Lumber There is a growing demand for lumber in Panama, owing to the increased building activity throughout the republic and the Canal Zone. All building lumber is imported, principally from the West Coast of the United States and Canada. (Press.)

Section 3
MARKET QUOTATIONS

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December 23 -- Livestock at Chicago (Closing Quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 10.00-12.50; cows good 5.50-6.50; heifers 550-750 lbs good and choice 9.00-12.25; vealers good and choice 9.00-10.50; feeder and stocker steers 500-1050 lbs good and choice 6.25-8.50. Hogs: 160-200 lbs good and choice 9.90-10.30; 200-250 lbs good and choice 10.15-10.40; 250-350 lbs good and choice 10.10-10.40; slaughter pigs 100-140 lbs good and choice 8.50-9.65. Feeding lambs range stock good and choice 8.75-9.35.

Grain: No. 1 D.No.Spr.Wheat* Minneap. 153-155; No. 2 D.No.Spr.* Minneap. 152-154; No. 2 Am.Dur.* Minneap. 145 $\frac{1}{4}$ -151 $\frac{1}{4}$; No. 1 Hard Amber Dur. Duluth 151 $\frac{1}{4}$ -163 $\frac{1}{4}$; No. 2 Hd.Wr.* K.C. 135-140 $\frac{3}{4}$; Chi. 136 $\frac{1}{2}$ -138 $\frac{1}{2}$; St. Louis 140-140 $\frac{1}{2}$; No. 2 S.R.Wr. St. Louis 140 $\frac{1}{2}$; No. 1 W.Wh. Portland 112 $\frac{1}{2}$. No. 2 rye Minneap. 108 $\frac{5}{4}$ -115 $\frac{3}{4}$. No. 2 yellow corn, K.C. 116-117 $\frac{1}{2}$; St. Louis 109 $\frac{1}{2}$; No. 3 yellow, Chi. 106 $\frac{1}{4}$ -109. No. 3 white oats, Minneap. 49 3/8-50 7/8; K.C. 52 $\frac{1}{2}$ -54 $\frac{1}{2}$; Chi. 51-52; St. Louis 53. No. 1 malting barley Minneap. 132-134; No. 3 good malting Minneap. 122-130; No. 2 Minneap. 84-91. No. 1 flaxseed Minneap. 216 $\frac{3}{4}$ -229 $\frac{3}{4}$.

Maine sacked Green Mountain potatoes \$2.35-\$2.60 per 100 pounds in eastern cities; \$1.92 $\frac{1}{2}$ -\$1.97 $\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites \$1.85-\$2.10 carlot sales in Chicago. Idaho sacked Russet Burbanks \$2.65-\$2.80 carlot sales in Chicago; \$1.85-\$2 f.o.b. Idaho Falls. Florida Bliss Triumphs \$1.60-\$2 per bushel crate in city markets. New York Yellow onions 40¢-75¢ per 50-pound sack in the East; 55¢ f.o.b. Rochester. Midwestern stock 50¢-75¢ in city markets. New York Danish type cabbage 50¢-80¢ per 50-pound sack in terminal markets; sacked per ton; \$18-\$20 f.o.b. Rochester. South Carolina Pointed type 85¢-\$1.05 per 1 $\frac{1}{2}$ -bushel hamper in terminal markets. Texas Round type \$1.75-\$2.75 per lettuce crate in consuming centers; \$1 f.o.b. Lower Rio Grande Valley points. New York U.S. #1, 2 $\frac{1}{2}$ inch minimum Rhode Island Greening apples \$1.25-\$1.37 $\frac{1}{2}$. per bushel basket in New York City; McIntosh \$1.50-\$1.75.

The average price of Middling 7/8 inch spot cotton in ten designated markets advanced 12 points from the previous close to 12.61 cents. On the same date last year the price was 11.65 cents. March futures contracts on the New York Cotton Exchange advanced 12 points to 12.23 cents, and on the New Orleans Cotton Exchange advanced 12 points to 12.18 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, 34 $\frac{3}{4}$ cents; 91 Score, 34 $\frac{1}{2}$ cents; 90 Score, 33 $\frac{3}{4}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, 19 $\frac{1}{2}$ cents; S.Daisies, 18-18 $\frac{1}{2}$ cents; Y.Americas, 18 $\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, 34 cents; Standards, 33 $\frac{1}{2}$ cents; Firsts, 31 $\frac{1}{2}$ -31 $\frac{3}{4}$ cents. (Prepared by BAE)

*Prices basis ordinary protein.
Chicago - Nominal.

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DAILY DIGEST

Prepared in the Press Service, Office of Information, United States Department of Agriculture, for the purpose of presenting all shades of opinion as reflected in the press on matters affecting agriculture, particularly in its economic aspects. Approval or disapproval of views and opinions quoted is expressly disclaimed. The intent is to reflect the news of importance.

Vol. LXIII, No. 73

Section 1

December 29, 1936

HEAVY OXYGEN PRODUCTION Mass production of "heavy oxygen", a goal for which research workers have been striving since the discovery of heavy hydrogen, has at last been achieved in the laboratories of Columbia University, Dr. Harold C. Urey, winner of the Nobel prize in chemistry, announced yesterday. The announcement was made at the opening session of a two-day symposium on "Absorption and Extraction", sponsored by the American Chemical Society. The mass production of "heavy oxygen" was made possible, Dr. Urey explained yesterday, by special apparatus designed by Dean George B. Pegram of the Graduate Faculties of Columbia. (Press.)

TENN. VALLEY REPORT The Tennessee Valley Authority contended in its annual report yesterday that it had opened up a vast new market for power "and that benefits gained are as available to private enterprise as they are to publicly owned utilities". "The vicious circle of high rates and low use is being broken in the area of privately owned power as well as in that which is owned by local agencies," the report said. (Press.)

VOCATIONAL AGRICULTURE E. W. Butterfield, education commissioner for Connecticut, told teachers gathered for a meeting of five state educational organizations last night that vocational agriculture should be taught in all city schools to provide pupils with a "rounded" training. "There is no city that does not represent an area characterized by some form of specialized agriculture," Mr. Butterfield said. (A.P.)

STATE MILK CONTROL LAWS Conflicting views on the value of current state milk control laws were set forth yesterday at a conference of milk control officials of four states and spokesmen for various groups seeking stabilization of the dairy industry in the states in the New York milk shed. Representatives from New York, New Jersey, Pennsylvania and Vermont were present and will conclude the sessions today. Dr. Leland Spencer, professor of marketing at Cornell University, praised the New York and New Jersey milk control laws and declared they had played a vital part in bringing a "very substantial recovery" in the dairy industry. Fred H. Sexauer, president of the Dairymen's League, took the attitude that current control laws were "emergency" measures which failed to deal with long-range problems. (Press.)

Cotton Gin Improvement "Col. Clarence Ousley, editorial writer for the Cotton and Cotton Oil Press, comments on the fact that there are 3,335 active cotton gins in Texas and that the average season's business for each gin was less than 1,000 bales," says an editorial in Farm and Ranch (December 15). "A gin cannot make overhead on that kind of business if it is kept in good repair...Editor Ousley calls attention to the constantly decreasing acre yield of cotton in Texas and Oklahoma, the two states being lowest in acre yield of all cotton growing states. Texas and Oklahoma...are great in cotton area, but not in acre yield or length of staple. Constant cropping without regard to restoring organic matter or fertility has reduced both the quantity and character of the staple. If this should continue there will be fewer acres in cotton and fewer gins. Crop rotation and terracing or strip cropping is one of the answers to the problem of declining yields. There is ample evidence of the value of such a program. When livestock is added as one of the projects of the program, the cotton yields of Texas and Oklahoma will be restored to a profitable basis."

X-Ray Orange Test An X-ray machine built to see into the heart of an orange is being tested by the California Fruit Growers Exchange. At the rate of 22,500 oranges an hour--one-quarter of a carload--the machine carried the fruit on traveling belts before the two fluoroscopes, where operators examine the cost of the fruit. A touch of a lever discards imperfect oranges while the others are carried on to boxes. The quality of the fruit juice, faulty grains, dry cells and hollows are at once apparent to an experienced operator. The machine, it is said, will make unnecessary the present practice in some packing plants of throwing out entire lots of oranges when a few samples are found to be faulty."

Balk Strips Check Erosion "Effective control of erosion in the spring when rains are heavy and danger of soil losses are greatest is being obtained at the Tyler soil erosion station in east Texas through a system of strip cropping, known as the Tyler BWA or balk water-furrow strip-crop system," says L.E.C. in the Farmer-Stockman (December 15). "...Vetch remains on the ground through the winter. In the spring most of this crop is turned under but narrow strips of it on the contour are left. These act as a temporary buffer against gullying in the spring... Summer crops are planted on the lands between the buffer strips on the contour...The Tyler plan includes permanent summer strips of serecia lespe-deza. In June the vetch in the balk strips ripens. The vetch is plowed out, leaving contoured water furrows which are kept fallow. The lespedeza above these water furrows slows down the runoff water that has not been absorbed by the soil. Slowing the water down in this way allows more of it to soak into the soil for use of the growing crops through the dry period of the summer when it is needed. An excess of water caught by the water furrows runs off through protected outlets before it has had a chance to do much damage."

December 29, 1936

Power Alcohol Two chemists predicted at Atchison, Kansas, that power alcohol would become within ten years an economic force in American agriculture, says a press report. Dr. Leo M. Christensen and Dr. Harry Miller have for three months been producing on a research basis anhydrous alcohol made from a wide variety of farm products. Laboratory experiments over a period of years convinced them that anhydrous alcohol could be blended up to 20 percent with gasoline and used successfully as a fuel for high-compression combustion engines. It is being sold today from service stations in Nebraska, Kansas, South Dakota and Iowa. The price is the same as for regular gasoline. Carloads of cull sweet potatoes, molasses, rice, grain sorghums, rye, oats and barley have been used in the plant. Wheat, Irish potatoes and Jerusalem artichokes are yet to be tried. Some of the raw materials have been tried in combinations. One of the best, Dr. Christensen said, was grain sorghum, oats and barley.

German Land Reclamation "The biggest land reclamation project in Europe, far surpassing Premier Mussolini's conversion of the Pontine marshes into fertile fields, is now being carried through the driving power of the authoritarian National Socialist State in the northwesternmost corner of Germany, in Oldenburg, East Friesland and the Emsland along the Netherlands frontier," reports Otto D. Tolischus in a Berlin wireless to the New York Times. "When completed, the project is supposed to reconquer from the bogs, swamps and backwash of the North Sea, which flood the region during storms, a whole new province comprising some 250,000 acres, which would be sufficient for more than 5,000 peasant homesteads between 37 and 50 acres each, enhancing Germany's meager food supply by that much. What can be done with such land is shown by the Dutch, who have cultivated their side of the same marshes for centuries..."

Farm Credit Report A substantial increase in new agricultural financing and greater importance of cooperative credit institutions during the coming year were predicted by Governor Myers of the Farm Credit Administration in his annual report to President Roosevelt. The thirteen banks for cooperatives put more business on their books during the last half of 1936 than in any similar period since their organization, loans outstanding having increased from \$39,000,000 to \$72,000,000 between June 30 and December 1, according to Governor Myers. Of the latter total, about \$24,000,000 was in commodity loans, he explained. Upturns in cooperative cash financing of crop production, more financing of farm purchases and a larger credit business with farmers' cooperative marketing and purchasing associations featured the 1936 business of the Farm Credit Administration, Mr. Myers said.

Soviet Tung Oil The Soviet Union is devoting serious attention to the development of a domestic tung industry and as climatic and soil conditions in its Georgia region are somewhat similar to those found in our Gulf Coast States where some 75,000 acres are now planted to tung trees the Soviet Government is watching development of the American industry with interest, according to the Commerce Department's Chemical Division. Soviet Government tung oil commissions have toured the American tung belt during the past three years to study American methods of culture.

December 29, 1936

Section 3
MARKET QUOTATIONS

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December 28 -- Livestock at Chicago (Closing Quotations): Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 10.00-12.50; cows good 5.75-6.75; heifers 550-750 lbs good and choice 9.25-12.25; vealers good and choice 9.00-11.60; feeder and stocker steers 500-1050 lbs good and choice 6.75-8.50. Hogs: 160-200 lbs good and choice 10.25-10.60; 200-250 lbs good and choice 10.40-10.65; 250-350 lbs good and choice 10.30-10.65; slaughter pigs 100-140 lbs good and choice 8.75-9.00. Slaughter sheep and lambs, lambs good and choice 90 lbs down 9.00-9.65.

Grain: No. 1 D.No.Spr.Wheat* Minneap. $157\frac{1}{4}$ - $159\frac{1}{4}$; No. 2 D.No.Spr.* Minneap. $156\frac{1}{4}$ - $158\frac{1}{4}$; No. 2 Am.Dur.* Minneap. $147\frac{3}{4}$ - $153\frac{3}{4}$; No. 1 Hard Amber Durum, Duluth, $153\frac{3}{4}$ -167; No. 2 Hard Winter* K.C. $139\frac{1}{4}$ - $146\frac{3}{4}$; Chi. 141- $144\frac{3}{4}$; No. 2 S.R.Wr. St. Louis $143\frac{1}{2}$; No. 1 W.Wh. Portland 116; No. 2 rye, Minneap. $114\frac{3}{4}$ - $121\frac{3}{4}$; No. 2 yellow corn, K.C. 118- $120\frac{1}{2}$; No. 3, Chi. $106\frac{3}{4}$ - $109\frac{3}{4}$; No. 3 white oats, Minneap. 50 1/8-51 5/8; K.C. 53- $56\frac{1}{4}$; Chi. 52-53; St. Louis 53; No. 1 malting barley, Minneap. 132- 134 ; No. 3 good malting, Minneap. 120-128; No. 2, Minneap. 85-92; No. 1 flaxseed, Minneap. $220\frac{1}{2}$ - $233\frac{1}{2}$.

Maine sacked Green Mountain potatoes \$2.40-\$2.65 per 100 pounds in eastern cities; \$1.97 $\frac{1}{2}$ -\$2.07 $\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites \$2.00-\$2.10 carlot sales in Chicago. Idaho sacked Russet Burbanks \$2.90-\$3.10 carlot sales in Chicago; \$2.00-\$2.10 f.o.b. Idaho Falls. Florida Bliss Triumphs \$1.65-\$2.00 per bushel crate in a few eastern cities. New York Yellow onions 60¢-80¢ per 50-pound sack in the East. Midwestern stock 55¢-80¢ per 50-pound sack in city markets; 40¢- $47\frac{1}{2}$ ¢ f.o.b. West Michigan points. South Carolina Pointed type cabbage 75¢-\$1.25 per $1\frac{1}{2}$ bushel hamper in the East. Texas Round type \$1.35-\$2.50 per lettuce crate in consuming centers; 85¢-95¢ f.o.b. Lower Rio Grande Valley points. Tennessee Nancy Hall Sweetpotatoes \$1.25-\$1.50 per bushel hamper in the Middle West. New York U. S. No. 1, $2\frac{1}{2}$ inch minimum, Rhode Island Greening apples, \$1.25-\$1.50 McIntosh \$1.37 $\frac{1}{2}$ -\$1.85 and Baldwins \$1.25 per bushel basket in New York City.

The average price for Middling 7/8 inch spot cotton in the ten designated markets advanced 12 points from the previous close to 12.88 cents per pound. On the same day last year the price was 11.62 cents. March future contracts on the New York Cotton Exchange advanced 12 points to 12.51 cents and on the New Orleans Cotton Exchange advanced 14 points to 12.46 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, $34\frac{1}{2}$ cents; 91 Score, $34\frac{1}{4}$ cents; 90 Score, $33\frac{3}{4}$ cents. Wholesale prices of fresh No. 1 American cheese at New York were: Flats, $19\frac{1}{2}$ cents; S.Daisies, 18- $18\frac{1}{4}$ cents; Y.Americas, $18\frac{1}{2}$ cents. Wholesale prices of fresh eggs, Mixed colors, at New York (Urner Barry Company quotations) were: Specials, $32-32\frac{1}{2}$ cents; Standards, $31\frac{1}{4}$ - $31\frac{1}{2}$ cents; Firsts, $30-30\frac{1}{4}$ cents. (Prepared by BAE)

*Prices basis ordinary protein.

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DAILY DIGEST

Prepared in the Press Service, Office of Information, United States Department of Agriculture, for the purpose of presenting all shades of opinion as reflected in the press on matters affecting agriculture, particularly in its economic aspects. Approval or disapproval of views and opinions quoted is expressly disclaimed. The intent is to reflect the news of importance.

Vol. LXIII, No. 74

Section 1

December 30, 1936

POPULATION
SYMPOSIUM

"A possibility that civilized man may be headed by inexorable laws of nature toward the destiny that befalls lemings, little animals in Norway that show a tremendous, unexplained increase in population, followed by mass suicide, was suggested at the annual meeting of the American Association for the Advancement of Science yesterday by Prof. Raymond Pearl, biologist, of Johns Hopkins University," reports William L. Laurence in the New York Times. "Dr. Pearl, in a symposium on 'Experiment^a/Populations', discussed 'Biological Principles Affecting Populations' and cited evidence that there are definite natural principles that govern the size of populations throughout nature to which men and mice both are subject, though the principles may vary under different conditions..."

NEW PSEUDO-
MONAS SPECIES

A new germ which interferes with the work of public health officials in testing water supplies was reported to the Society of American Bacteriologists at Indianapolis yesterday. This germ destroys the bacteria whose presence in samples of drinking water shows that the water is unsafe. The germ is a heretofore unrecognized species of pseudomonas and was described by W. B. West, of the Arizona State Laboratory at Tucson. The new pseudomonas was found in 7 percent of all the water supplies received at the state laboratories. (A.P.)

GERMAN-
SOVIET TRADE

"Soviet-German trade has declined in the past year in proportion to the increasing political tension between the two countries, it is shown in Soviet customs statistics released yesterday," says Harold Denny in a Moscow cable to the New York Times. "Germany, which benefited most from Soviet purchases abroad during the early years of Russia industrialization programs, sold only \$20,000,000 worth of goods to the Soviet Union in the present year. This compares with about \$58,000,000 last year and \$86,000,000 in 1934. Soviet purchases from Germany diminished proportionately..."

FOREIGN TRADE

Reporting aggregate foreign trade for the first nine months of this year at the highest level since 1930, the Chamber of Commerce of the United States yesterday said higher prices were an important factor in the gain. Total exports and imports for the period was set at \$3,499,000,000, compared with \$3,074,000,000 in the similar period last year and \$5,353,000,000 for the similar months of 1930. Export prices during 1936 have been 12 percent above the 1931-35 average. (A.P.)

December 30, 1936

A.A.A.S.
Meeting

"A new weight for the electron, the lightest particle in the material universe, recently determined by 'atom scales' fashioned largely of beams of light, was revealed at the opening general session of the annual winter meeting of the American Association for the Advancement of Science before a large gathering that included scores of America's most eminent scientists," reports William L. Laurence in the New York Times. "The electron, than which nothing smaller exists in the universe, has been found to 'tip' the atom scales at nine-tenths of a billionth of a billionth of a billionth of a gram, Dr. Karl T. Compton, president of Massachusetts Institute of Technology, said in his address as retiring president of the association. Dr. Compton's topic was 'The Electron: Its Intellectual and Social Significance'. The latest weighing shows the electron to be considerably lighter than had been indicated on previously devised 'scales'..."

Fruit Juice
Business

Business Week (December 26) reports that the total annual pack of fruit juices, including tomato juice, "is now valued at \$25,000,000 and is almost as large as the production of any one of the three canned vegetable stars--tomatoes, peas, and corn--and larger than any of the big three of canned fruits, peaches, pineapples, and pears. And the juice industry appears to have developed without upsetting any part of the packing field. The 345,000 tons of fruit which were turned into preserved juices last year amounted to 3 1/3 percent of the nation's total supply of fruit and even the canned fruits normally take only 10 percent of the total yield. More than one-fourth as much fruit was made into juices as was dried. As analysis of figures prepared by the National Canners Association shows that, out of every 100 cases of canned fruit and fruit products produced in the United States last year, 13 cases were canned juice. Adding the bottled juice and canned tomato juice output, the entire straight canned fruit pack was less than 2 1/2 times larger than the juice production. This growth, it must be remembered, has all taken place within 10 years...The public will now find on grocery shelves such newcomers among preserved juices as apricot, peach, pomgranate, cherry and prune in addition to the well established favorites--grapefruit, pineapple, orange, lemon and loganberry..."

Cotton
Sugar Bags

"Some time ago a news item from Washington, D.C., revealed the federal technologists were working in cooperation with the North Carolina State College in developing a cotton raw sugar bag which may eventually displace the old burlap bag now commonly used by packers and shippers," says an editorial in the Houma (La.) Times. "It is claimed that the new bag has already met with laboratory tests and will be placed into service, carrying raw sugars from Hawaii to refineries on the Pacific Coast...Should it prove successful its use annually for shipping raw sugars would consume approximately 50,000 bales of cotton...We hope that all the sugar interests of the nation will sense the importance of the new enterprise and demand the general use of cotton bags in the service of raw sugars...It may be that the cotton bag may also be serviceable for the rice, corn, beans and other agricultural products that are successfully cultivated here in Terrebonne Parish. We hope our truck farmers will also find uses for the new 'cotton bag' in the near future."

Wildlife Promotion "The movement headed by Zack Cravey, Georgia Commissioner of Game and Fish, to organize clubs throughout the state for the preservation of wildlife is entitled to the warmest encouragement," says an editorial in the Macon Telegraph. "...More and more farmers are asking how they can increase, manage and make better use of wild life as a farm crop. They want specially plans that will make it possible to produce wildlife as a sideline to their ordinary farming operations according to the U.S. Department of Agriculture. The Bureau of Biological Survey is developing practical suggestions for the management and restoration of wildlife. Some ideas already developed are being applied on a number of farms. The Extension Service has arranged for the Biological Survey to offer more assistance to farmers and others in this field. I. T. Bode, formerly conservationist with the Survey, has been appointed the first wildlife specialist under the Extension Service...Perhaps of most recent importance is the request from farmers for assistance in plans for managing game birds and animals as a farm crop. The cooperative arrangement with the Extension Service will make it possible to do a good job in aiding the farmers who are interested in wildlife management..."

Inter-American Trade Basis "Inconspicuous among the peace, neutrality and security projects before the inter-American conference at Buenos Aires are two seemingly unimportant proposals, but which constitute a firm foundation for the welfare, amity and solidarity of the two Americas," says an editorial in the Courier-Journal (La.). "They call for equality of treatment in international trade and reduction of excessive barriers of trade. They were put forward by the United States delegation and represent the economic aspirations of that delegation...The proposal for equality of treatment in international trade may be regarded as another move to bring the United States and Argentina closer together. The South American republic looks upon our sanitary restrictions as discriminatory and a pretext to bar its sheep and cattle from the American market. President Roosevelt has declared he would urge the Senate to remove this unjust restriction in the case of sheep from Patagonia, which is far removed from the area affected by hoof and mouth disease. The stand of the Washington delegation against trade discrimination is a stand for just and equitable treatment of all nations..."

Crossbred Champion The Field (London, December 12) says: "Scotland has claimed the honors of the Smithfield Club's show again. The Scot is a shrewd judge of a beef beast and the art of breeding and feeding the best has not happily been sacrificed so entirely to milk selling as has been the case in England. The champion is a first cross steer bred by an Aberdeen-Angus bull from a Shorthorn cow. The breeder is Mr. Grant, of Boat of Garten, Inverness-shire, and the successful exhibitor Mr. G. G. Reid, of Ballindalloch, Banffshire. In 1928 Mr. Reid's father took the Smithfield and the Edinburgh championships, as his son has now done. This steer is a magnificent specimen, full of meat and not coarse in the bone. At the age of two years and ten months he weighs 15 1/2 cwt. The reserve is a purebred Aberdeen-Angus heifer of the same age, bred and exhibited by Sir P. Prince-Smith. This heifer is another perfect specimen. Her weight is 12 cwt..."

Section 3
MARKET QUOTATIONS

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December 29 -- Livestock at Chicago (Closing Quotations);
 Slaughter cattle, calves and vealers, steers 900-1300 lbs good and choice 10.00-12.50; cows good 5.75-6.75; heifers 550-750 lbs good and choice 9.25-12.25; vealers good and choice 9.50-11.50; feeder and stocker steers 500-1050 lbs good and choice 6.75-8.50. Hogs: 160-200 lbs good and choice 10.00-10.45; 200-250 lbs good and choice 10.20-10.50; 250-350 lbs good and choice 10.10-10.45; slaughter pigs 100-140 lbs good and choice 8.25-9.60. Slaughter sheep and lambs, lambs good and choice 90 lbs down 9.25-9.85.

Grain: No. 1 D.No.Spr.Wheat* Minneap. $156\frac{3}{4}$ - $158\frac{3}{4}$; No. 2 D.No.Spr.* Minneap. $155\frac{3}{4}$ - $157\frac{3}{4}$; No. 2 Am.Dur.* Minneap. 147-153; No. 1 Hard Amber Durum, Duluth, 153-167; No. 2 Hard Winter* K.C. $139\frac{3}{4}$ - $145\frac{1}{2}$; Chi. $140\frac{1}{4}$ -143; St. Louis 143; No. 2 S.R.Wr. St. Louis 143; No. 1 W.Wh. Portland $115\frac{1}{2}$; No. 2 rye, Minneap. $112\frac{7}{8}$ - $119\frac{7}{8}$; No. 2 yellow corn, K.C. $118\frac{1}{2}$ - $120\frac{1}{4}$; St. Louis $110\frac{1}{2}$; No. 3, Chi. $104\frac{1}{2}$ -108; No. 3 mixed oats, Minneap. $49\frac{7}{8}$ - $51\frac{3}{8}$; K.C. 53- $55\frac{1}{2}$; Chi. $52\frac{1}{2}$ - $52\frac{3}{4}$; St. Louis 53; No. 1 malting barley, Minneap. 132-134; No. 3 good malting, Minneap. 120-128; No. 2, Minneap. 84-91; No. 1 flaxseed, Minneap. $222\frac{1}{2}$ - $235\frac{1}{2}$.

Florida Bliss Triumph potatoes \$1.25-\$2 per bushel crate in city markets. Maine sacked Green Mountains \$2.50-\$2.75 per 100 pounds in eastern markets; $2.07\frac{1}{2}$ f.o.b. Presque Isle. Wisconsin sacked Round Whites \$2-\$2.05 carlot sales in Chicago; \$1.85 f.o.b. Waupaca. Idaho sacked Russet Burbanks \$2.85-\$3.10 carlot sales in Chicago; \$2.10-\$2.25 f.o.b. Idaho Falls. New York Yellow onions 60¢-75¢ per 50-pound sack in the East. Midwestern stock 55¢-80¢ in consuming centers; 40¢-42¢ f.o.b. West Michigan Points. East Shore Maryland and Virginia Jersey type sweet potatoes 75¢-\$1.35 per bushel basket in city markets. Tennessee Nancy Halls \$1.25-\$1.45 in the Middle West. New York Danish type 60¢-70¢ per 50-pound sack in terminal markets; \$19.50-\$21 sacked per ton f.o.b. Rochester. South Carolina Pointed type 90¢-\$1.12 $\frac{1}{2}$ per $1\frac{1}{2}$ -bushel hamper in city markets. Texas Round type \$1.75-\$2.50 per western lettuce crate in city markets; 90¢-\$1 f.o.b. Lower Rio Grande Valley Points. New York U.S.#1, $2\frac{1}{2}$ inch minimum, Rhode Island Greening apples, \$1.25-\$1.50 and McIntosh \$1.50-\$1.75 per bushel basket in New York.

The average price for Middling 7/8 inch spot cotton in the ten designated markets declined 15 points from the previous close to 12.73 cents per pound. On the same day last year the price was 11.70 cents. March future contracts on the New York Cotton Exchange declined 15 points to 12.36 cents and on the New Orleans Cotton Exchange declined 13 points to 12.33 cents.

Wholesale prices of fresh creamery butter at New York were: 92 Score, $34\frac{1}{2}$ cents; 91 Score, $34\frac{1}{4}$ cents; 90 Score, $33\frac{3}{4}$ cents. Wholesale prices of No. 1 fresh American cheese at New York were: Flats, $19\frac{1}{2}$ cents; S.Daisies, 18- $18\frac{1}{4}$ cents; Y.Americas, $18\frac{1}{2}$ cents. Wholesale prices of fresh eggs, mixed colors, at New York (Urner Barry Company quotations) were: Specials, $31\frac{1}{2}$ -32 cents; Standards, $31-31\frac{1}{4}$ cents; Firsts, $30-30\frac{1}{4}$ cents. (Prepared by BAE)

*Prices basis ordinary protein.

DAILY DIGEST

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Section 1

December 31, 1936

MICRO-ANALYSIS

OF PLANT LIFE

An instrument that has far-reaching implications in certain types of micro-analysis in the study of plant life and possibly in medicine was described by Dr. E. D. McAlister, Smithsonian Institution physicist, at a plant physiology symposium yesterday in connection with the American Association for the Advancement of Science. The mechanism, which was developed by Dr. McAlister, measures instantaneously carbon dioxide concentration in air with the precision of one part in a million and has already shed new light on some phases of the behavior of plants which have thus far eluded investigators. A possible future field of usefulness will be in measuring human basal metabolism, now a standardized medical practice which requires a long time. (Press.)

SILICOSIS

PREVENTION

Dr. R. C. Emmons, of the University of Wisconsin, reported to the Geological Society of America yesterday the apparently successful use of foreign dust particles as a preventive for silicosis, the widespread industrial disease caused by inhalation of silica particles. After two years of search, he said, "we have been encouraged to believe we have found a preventive...The process of preventing silicosis involves, briefly, the mixing of certain other dusts with the silica in the air so that the silica dust, when breathed, is rendered harmless to the lung tissue." (A.P.)

FARM LABOR IN SOUTH

Calvin Hoover, of Duke University, N.C., said yesterday industrial outlets for excess agricultural labor in the South were needed before elimination of farm tenancy and share cropping could be expected to improve the standard of living. Hoover told the American Economic Association that responsibility for the low living standard in southern agriculture was due to a population too large for the available land resources. If industrial labor outlets could be provided, he said, the size of owner-operator holdings could be larger than the former allotment of the share cropper. (A.P.)

GERMAN TRADE

A Vienna, Austria, wireless to the New York Times says the German commercial debt to Yugoslavia resulting from the recent trade agreement amounted at mid-December to more than \$80,000,000, it is revealed by the Politika, which has close relations with the government. The newspaper points out that Germany, evidently under pressure of economic stringency, is steadily increasing her purchases from Yugoslavia, but fails to pay cash and asks Yugoslavia to balance the deficit with more purchases from Germany.

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Plantation
Economy

The Economic Journal (London, December) prints an address by C. R. Fay of the University of Cambridge, on "Plantation Economy". One paragraph says: "And today plantation denotes not only a system of agriculture but a system which chiefly grows plants from wood as opposed to plants from grass: tea, coffee, cocoa, coconut, cinchona. No doubt the capital investment required in raising wood plants has been instrumental in bringing these products under the plantation system, though it has not made it impossible for native growers, e.g. in rubber, to produce for themselves. There are no cotton or tobacco plantations in India and only a few sugar plantations; and although indigo is a grass plant and provided the first form of plantation in India, it has all but disappeared through the supercession of indigo in commerce by aniline dyes. In method of exploitation, therefore, the plantation of today is closer to certain forms of forestry than it is to grain crops or roots. One may think of it with advantage as intensive forestry conducted in regions of hitherto sparse population."

Chain Stores
and Farmers

"One chain store maneuver credited with an important share in the defeat of California's anti-chain tax in last month's referendum was the yoeman aid which the mass distributors rendered in moving surplus fruits and vegetables--particularly a 4,000,000 case surplus of peaches--to market at stable prices. That helped chains win the farm vote. Independents could match them advertisement for advertisement, dollar for dollar in the big campaign, but they couldn't deliver organized marketing aid. As the big man vs. little man fight grows hotter along the whole distribution front, the independents are preparing to match the chains' bid for farm support. They have set up an Independent Food Distributors Council with headquarters in Chicago where permanent operating plans will be mapped during the week of the big food conventions January 24-31..."

Boric Apple
Treatment

Over 40,000 boxes of perfect fruit were added to the 1936 harvest in the Okanagan Valley through the direct efforts of the laboratory at the Summerland Experiment Station, according to an official report to the Dominion Department of Agriculture from the station, says a British Columbia report in Country Life in B.C. (Christmas). The gain has been derived through the success of experiments on the control of certain disorders such as drought spot and corky core by means of boric acid. Approximately six cars of boric acid were used throughout the district in the fall of 1935 and results have been very satisfactory, according to the official report.

Wild Game
Hatcheries

Hatcherries for quail and wild turkeys, which may become the largest of the kind, are being developed by the Civilian Conservation Corps under the joint supervision of the National Park Service and the Tennessee Fish and Game Conservation Commission, Robert Fechner, director of the CCC, said recently. The site, to be known as the Buffalo Spring Fish and Game Preserve, is about 30 miles northeast of Knoxville, Tenn. "More than 15,000 quail were raised last summer on completion of a first group of 200 laying pens and 12,000 of the birds were used in stocking lands where hunting is restricted," he said. (New York Times.)

Yearbook
Review

Maury Maverick reviews the 1936 Yearbook of Agriculture in the New Republic (December 30) and says "though such publications generally give me the miseries, I read--and I swear it--until a rooster...crowed raucously." He says in part: "Of course, general life processes cannot be speeded up like machines. But what happens with increased knowledge is that the breeder can set definite objectives, like resistance to disease in tobacco, or longer staple in cotton, or greater productivity in corn, and attain them with ever increasing certainty and prevision. As a result, the science is getting bolder and daring to dream of creating wholly new forms of life that will fit our needs better and give us greater abundance than the forms we now have. Outstanding specialists write a series of articles on the breeding of improved forms; of the wheat you eat, the cotton on your back and the tobacco you smoke. There are stories of 'dual-purpose' (meat and dairy products) cows, horses, swine, sheep and poultry--all told in language more nearly non-technical than any I have seen in previous publications...They bring out some of our illusions, or traditions--for instance, that of pure-blooded stock. Slavishly, we have the 'pure-blooded' theory, which may be all out of line with sensible improvement, or ordinary utilitarian purposes. There are 'vested interests' among the breeders, who fight change and progress. The Yearbook boys are fairly frank in calling a spade a spade."

Barley Research
in Canada

Canadian Chemistry and Metallurgy (December) says: "In close cooperation with industry, research on malting barley is being carried out in the division of biology and agriculture of the (Canadian) National Research Laboratories. The basis is being sought for the selection of the most desirable types of barley for malting, as maltsters ordinarily pay a premium, ranging at the present time up to 25 cents a bushel...The research was undertaken at the suggestion of the National Barley Committee early in 1935. An existing experimental malting laboratory in the Department of Agronomy, University of Manitoba, was developed as a service laboratory for testing new varieties of barley developed by plant breeders and for the investigation of the effect of environmental conditions on malting quality. A second laboratory in the National Research Laboratories, Ottawa, is designed for the development and standardization of the experimental malting test and as an aid to basic research on malting quality..."

Legumes and
Profits

"A survey based upon records kept on 112 farms in North Central Kansas and reported by the Extension Service of Kansas State College emphasizes the importance of legumes," says an editorial in the Weekly Kansas City Star (December 23). "In 1935 farmers who kept more than 30 percent of their land in legumes received a net return of \$12.49 an acre or double the earnings of those who grew no legumes. In 1932 when prices of farm products reached their lowest level the legume growers had a profit of \$1.17, while those who did not grow them suffered a loss of 73 cents to the acre. As a general rule those who seed legumes are better farmers. They carry more livestock, have more feed in drought years and secure higher yields of corn, wheat and other crops under both favorable and adverse conditions. The Kansas Experiment Station has found that a 16-year rotation of alfalfa, corn and wheat has produced crops worth \$5.10 more an acre annually than a rotation of corn and wheat without alfalfa..."

